A COMPARISON OF TEACHERS' PERCEPTION
BETWEEN COMMUNICATIVELY IMPAIRED
CHILDREN AND THEIR PEERS

A Thesis
by
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ABSTRACT

A COMPARISON OF TEACHERS’ PERCEPTION BETWEEN COMMUNICATIVELY IMPAIRED CHILDREN AND THEIR PEERS. (May 1984)

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The purpose of this study was to determine if public school teachers perceive communicatively impaired children differently when compared with non-communicatively impaired peers in the same classrooms.

To measure the degree of correlation, this study compares the classroom teachers' responses to questionnaires completed on communicatively impaired children and non-communicatively impaired peers in the same classrooms. Communicatively impaired children were children only receiving speech and/or language services. The peer group was selected and matched with communicatively impaired children in the same classrooms. Children enrolled in any special program (i.e., reading, special education, hearing impaired, and/or gifted and talented) were omitted for the purpose of this study. All communicatively impaired children were identified from Watauga County speech-language
caseload. Twenty-three regular classroom teachers served as participants in the study.

The purpose and procedures of the study were explained to principals in the target Watauga County Schools. The teachers were contacted and asked to participate in the study. After the 24 item questionnaires were completed on the identified children, the purpose of the study was explained.

The Wilcoxon matched-pairs signed ranks test was used for the statistical analysis. The analysis revealed that a significant difference existed in four of the 24 questionnaire statements. The results suggested that a significant difference exists between teachers' perception of communicatively impaired children and peers, specifically within the areas of: 1) taking leading parts in class projects; 2) helping other children with their work; 3) praising neat work; and 4) having things ready to begin work.
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CHAPTER I

INTRODUCTION

Statement of the Problem

Speech language pathologists are concerned how public school teachers perceive the communicatively impaired student in the regular classroom. If teachers are perceiving communicatively impaired children in their classrooms as having more academic, behavioral, and social adjustment problems then their mode of interaction may result in a self fulfilling prophecy (Rosenthal & Jacobson, 1968). Bennett and Runyan (1982) surveyed regular classroom teachers and special educators and discovered that 69 percent felt that communication disorders adversely influenced academic and/or social performance.

According to Meyen (1978), classroom teachers are usually the first professionals to recognize that a student is experiencing a communication problem. Filter (1977) stated communication disorders are the most frequently found handicapping condition among school age children. From reviewing the research it is estimated that between eight and ten percent of school age children exhibit some type of oral communication problem severe enough to interfere with education (Phillips, 1975; Filter, 1977). As a result, it is important for the speech language pathologist to know
how regular classroom teachers feel about and react to communicatively impaired children.

Gearheart and Weishahn (1976) noted in their research that teachers have a profound effect on students' behavior and achievement. Moreover, research indicated that teachers' attitude can either facilitate or impede students' success in school. Meyen (1978) stated classroom teachers may play a vital role in enhancing their students' communication development and suggested that teachers function as part of a team working toward enhancing communication development. Suggestions included setting good speech standards, showing support and understanding to those children indicating problems, and becoming knowledgeable of students with special needs.

Clauson and Kopatic (1975) and Phelps and Koenigsknecht (1977) conducted studies to investigate teachers' attitudes toward speech language programs and children enrolled in the programs and indicated that future research is necessary regarding the assessment of attitudes toward speech and language services. Bennett and Runyan (1982) recommended as a result of their survey that further study is warranted on educators' perception of the effects of communication disorders on educational performance. In light of these studies, it is feasible to research teachers' perceptions or attitudes toward communicatively impaired children.
Purpose of the Study

The purpose of this study is to determine if regular classroom teacher's perception of communicatively impaired students in his/her classroom differ when compared with their peers.

Statement of the Null Hypothesis

There is no significant difference in teachers' perception of communicatively impaired students in their classrooms as compared to normal peers in the same classroom at the .05 level of significance.

Assumptions of the Study

Assumption 1: Teachers will complete the questionnaire based on their attitudes, beliefs, and knowledge of those children identified for the purpose of this study.

Assumption 2: Teachers in the study are assumed to be responding to the questionnaire without the aid of notes or information significant to the study from the speech language pathologist, principal, or other school personnel.

Assumption 3: The questionnaire devised for the purpose of this study is assumed to be statistically reliable and valid.

Limitations of the Study

Limitation 1: This study is limited to four elementary schools in Watauga County.
Limitation 2: Participants in this study are limited to kindergarten through fifth grades.

Limitation 3: Teacher's experience, such as having had a course and/or workshop discussing communication disorders and/or having a communicatively impaired student, friend and/or family member may have more accurate beliefs and attitudes toward communicatively impaired children. Apparently increased knowledge tends to create more positive attitudes toward communicatively impaired students (Haring, 1954; Phelps and Koenigsknecht, 1977; and Phillips, 1976).

Methodology

By distributing a written questionnaire to teachers in Watauga County to complete on selected peers the degree of correlation between responses will be determined. The Wilcoxon matched pairs signed ranks statistical analysis compared the teachers' responses to the questionnaire statements for the two groups.

Definitions

For clarity of meaning and convenience of the reader, certain terms used throughout this study are defined in the following listing. These definitions are simplified for purpose of this study.

Communicatively impaired are those students enrolled only in the speech and/or language program exhibiting oral communication impairments, i.e., students enrolled in the
reading program, special education program, hearing impaired program, and/or gifted and talented program were omitted.

**Oral communication impairment** is the inability to express one's self clearly or to understand others. Oral communication impairments include the following areas:

**Articulation impairment** is the abnormal production of specific speech sounds, i.e., substitutions - "wun" for "run"; distortions - "ship" for "slip"; omissions - "do-" for "dog".

**Language impairment** is a deficiency in expressing, comprehending, or otherwise functionally utilizing a spoken message.

**Fluency disorder** is disruptions in the speech flow characterized by repetitions, hesitations, prolongations, interjection, and blocks.

**Voice disorder** is the noticeable deviation in the production of vocal quality, pitch, loudness, and/or duration.

**Hearing impairment** is the loss of hearing acuity and/or hearing discrimination and may be classified as deafness or hard of hearing.

**Normal peers** are children not being seen in any habilitative or rehabilitative program, i.e., reading, special education, hearing impaired, and/or gifted and talented program.
Scope of the Study

Future research is necessary regarding teachers' attitudes and perceptions of communicatively impaired children in public schools (Bennett & Runyan, 1982; Phelps & Knoenigsknecht, 1977; and Clauson & Kopatic, 1975). Phillips (1976) stated that the regular classroom teacher creates situations each day in which students can either be demoralized or helped to improve their speech. In addition, teachers are afforded with opportunities to help students accept their communication problem(s) and grow as a person in spite of their communication impairment.

As a result, it is imperative that speech language pathologists determine the perceptions and attitudes that regular classroom teachers have toward communicatively impaired students. Only when those perceptions and attitudes are determined can speech language pathologists begin measures to educate teachers. Such measures include in-service programs, workshops, invitations to observe therapy, and involvement in interpretations of speech and language programs (Neidecker, 1980).
CHAPTER II
REVIEW OF RELATED LITERATURE

Introduction

The roles of the speech language pathologist and the regular classroom teacher have undergone tremendous changes in the past ten years. Federal and state legislation mainstreamed thousands of handicapped children into the public school system to be educated, primarily by the regular classroom teacher. As a result of legislation such as Public Law 94-142, it has become essential for speech pathologists and other school personnel to function as a team in order for children to develop and reach their potential. An increase in teachers' knowledge concerning communication impairments result in better teams and programs for communicatively impaired students. Rosenthal and Jacobson (1968) established that preconceived ideas and attitudes can influence children's behavior and overall classroom atmosphere. Children tend to perform the way significant others think they will.

Changing Structure in the Schools

During the past decade, the role of the public school speech language pathologist has broadened in order to assist the school in accomplishing its commitment to education. The revolutionary changes were prompted primarily by the
implementation of the Education for All Handicapped Childrens Act of 1975, i.e., Public Law 94-142 (Van Hattum, 1982).

Garrard (1979) and Van Hattum (1982) noted in their review of the research that at least one change resulted from PL-94-142; i.e., more handicapped children, such as the mentally retarded, visually impaired, hearing impaired, learning disabled, emotionally disturbed, and physically disabled have been served in the public schools. Blanchard and Nober (1978) reviewed caseload profiles and found that clinician's caseloads reflect a significant increase in the number of children with language disorders, hearing impairments, organic pathologies, developmental delays, and multiple handicaps. In contrast, Garrard's review of the literature noted before PL-94-142 typical caseloads were occupied by approximately 80% articulation cases with the remaining 20% being comprised of voice, stuttering, and organic problems.

The changing school structure resulted in new roles for the speech language pathologist. Greater emphasis on the "total" communication development in handicapped children was a major change. Additional changes resulted in alternatives in language, speech, and hearing programs, an educational team approach to communication problems, and the expansion of professional competencies (Garrard, 1979). Phillips (1975) stated the speech language pathologist has to provide the student with opportunities to develop into
a "whole child" by providing opportunities for the student to improve his/her communication skills. Van Hattum (1982) noted in his research an increased acknowledgement of the importance of communication skills and the benefits in integrating developmental and therapeutic measures into the classroom.

Taylor (1981) indicated that state and federal legislation should serve to improve and strengthen the services provided by speech language pathologists. According to Taylor, the following changes have resulted from the implementation of PL-94-142: reduction in caseload size, modification of time requirements due to participation in assessment activities, IEP conferences, staffings, and report writing. With regard to caseload size, Blanchard and Nober (1978) noted a reduction in caseload size by 38% and the number of speech language clinicians employed in the school system increased by 22%. In addition, caseload profiles reflected significantly greater number of language disorders and more severely handicapping conditions. In summary, the changing structure in the schools has been affected by new techniques, knowledge, equipment, materials, and new professional demands (Blanchard & Nober, 1978; Garrard, 1979; and Van Hattum, 1982).

Van Hattum (1982) stated even though speech language pathologists work with fewer children, more services are provided, and children are assisted through alternative means, such as aides (i.e., paraprofessionals). Gearheart
have documented an increase in the number of paraprofessionals, and supportive personnel providing services to communicatively handicapped children. Taylor (1981) noted in a review of the existing literature that speech language professionals have experimented with both paid and volunteer supportive personnel.

## Role of the Speech Language Pathologist in the Schools

Various researchers have noted how the school structure has changed in the past decade as well as the roles of the speech language pathologist (Garrard, 1979; Taylor, 1981; and Van Hattum, 1982). The changing role of the speech language pathologist was evidenced by the variation in the terminology used to identify our profession. For example, the following terms have been used: speech teacher, speech correctionist, speech and language therapist, communication specialist, communicologist, and speech and language pathologist (Taylor, 1981; Neidecker, 1980). Speech language pathologist is the currently endorsed term by the American Speech and Hearing Association (ASHA). ASHA endorsed the title because it more accurately reflected the services provided to persons with communication disorders (Healy & Dublinske, 1977).

Ainsworth (1965) and Neidecker (1980) referred to two types of speech language pathologists in the schools, the separatist and the participant. The separatist fulfills
the responsibilities of diagnosing and remediation of communication disorders in children. In addition to diagnosing and remediation, the participant makes suggestions to teachers, principals, and parents concerning the communicatively handicapped child and becomes involved as a member of the school team. Similarly Van Hattum (1982 & 1969), discussed the role of the speech language pathologist as a member of the education team, consultant, counselor, researcher, and supervisor.

Neidecker (1980) defined the role of the speech language pathologist as follows:

1. The speech language pathologist plans, directs, and provides diagnostic and remediation services to communicatively impaired students.

2. The speech language pathologist is responsible for cooperation with other school and health specialists including audiologists, dentists, physicians, nurses, psychologists, guidance counselors, reading teachers, and special education teachers. Cooperation with these professionals results in effective programs for communicatively impaired students.

3. One of the most important roles of the speech language pathologist is working as an adjunct to the coordinating classroom teacher. Speech language pathologists are to provide information to increase educators understanding and knowledge of the nature of communication impairments. In addition, speech language pathologists are to provide
information to help reinforce communication development in the regular classroom (p. 131). Haring (1958) felt that classroom instruction, group discussions, lectures, films, and visitations are effective ways of increasing educators' knowledge of handicapping conditions as well as fostering more acceptable attitudes toward handicapped children.

Pickering and Kaelber (1978) noted that nationwide teachers are becoming increasingly cognizant of the need to emphasize communication development as an integral part of the regular classroom curriculum. Three factors are cited for the greater emphasis: 1) the relationship of reading to speech and language; 2) the growing importance of linguistics; and 3) the relationship of concept development and meaning to speech and language. As a result, speech language pathologists have professional responsibilities to help develop a total school environment favorable to speech and language development. Blanchard and Nober (1978) indicated that clinicians' responsibilities have expanded to include the preschool population and students in the 16 to 21 years of age group. Garrard (1975) stressed the need for preschool speech and language programs since regular classroom teachers cannot handle the increased number of handicapped preschool students.

Freeman (1977) described the role of the speech language pathologist in the following terms. The speech language pathologist's responsibility is to evaluate and diagnose verbal communication problems, formulate and
direct plans to facilitate improvement in children's skills. Falck (1978) noted the role of the speech language pathologist varies depending on state and local situations. Yet, speech language pathologists must have competencies which reflect their ability to work with children, with other team members, parents, and significant others in the community. According to Falck, the major contribution of the speech and language pathologist was to provide direct services to children with mild to moderate communication disorders. Additional contributions included services to prevent deviations of communications, early interventions strategies in the classroom, support of auxiliary personnel, and support services to other team members. Thus, one role of speech language pathologists was to be professional partners working with significant persons in the child's environment (Falck, 1978).

In summary, the roles of speech language pathologists in school systems nationwide have changed in the past decade. No longer are assessment and direct intervention the only responsibilities speech language pathologists have. Preschool programs, parent counseling and supervision are of increasing importance. In addition, functioning as a team member with other school personnel has been included as a role of the speech language pathologist.
Relationship of the Speech Language Pathologist with the Classroom Teacher

Classroom teachers have great influence on the development of the child with a communication impairment (Van Hattum, 1982). Phillips (1975) stated that classroom teachers have a dual role to play with regard to speech and language development. According to Phillips, classroom teachers should support and reinforce the work of the school speech clinician and provide speech improvement for all children.

Gearheart and Weishahn (1976) stated the role of the teacher depends on the type and the extent of the pupil's problem. Teachers must deliberately be aware of speech and language problems, refer children with communication problems, assist the school's speech language pathologist with classroom programs, and be alert to possible opportunities to provide speech and language stimulation for all children. Gearheart and Weishahn (1976) further expanded the role of classroom teachers by stating teachers must be aware of their own speech and language patterns and the influence of those patterns on their student's development. Last, in order for the teachers to fulfill their role, they must know some basic information about speech and language in order to determine what remedial services may be effective.

Van Hattum (1982) described the role of the classroom teacher in similar terms. Van Hattum stated these additional roles: the teacher must have an understanding of
formal speech and language development, be able to identify students who need speech and language services, be well informed on how to incorporate the objectives of the speech language program with the objectives of the regular classroom curriculum, accept children and help classmates accept communicatively impaired children, and be an active member in the child's individual education program (IEP) team.

Gearheart (1972) discussed the role of the classroom teacher in terms of speech improvement goals. The goals included helping the child to identify characteristics of adult speech, to improve the child's self-hearing, fluency and ability to put ideas into words effectively, to create a consciousness of good voice quality, and to help the child express his/her feelings and conflicts.

Neidecker (1980) stated as part of the changing role of the speech language pathologist, the need for an attainment of cooperation between the classroom teacher and the speech language pathologist. It is essential for the classroom teacher to understand the speech and language program. As a result Neidecker provided the classroom teacher with some specific suggestions of supporting 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).

Regular classroom teachers may be more cooperative and supportive as team members if they are knowledgeable about the speech and language program. In addition to knowledge, the classroom teacher's attitude must be conducive to working with the speech language pathologist.

Attitudes of classroom teachers toward the speech and language programs in their respective schools are documented in the literature. Lloyd and Ainsworth (1954) interviewed 54 teachers concerning the speech and language program at their school. The implications of the study were that teachers are aware of their inadequacies and are favorable of extensive education regarding classroom speech problems. More recently, Clauson and Kopatic (1975) conducted a study revealing that teachers are aware of their strengths and weaknesses in the understanding of communication disorders, but are uncertain as to whether they would be willing to augment their knowledge of classroom speech and hearing problems.

In closing, Signoretti and Oratio (1981) stated the importance of the role of the classroom teacher as an adjunct to school speech language remediation programs. Phillips (1975) stressed the importance of the relationship between teachers and speech language pathologists by stating teachers must form a team with speech language
pathologists whose objectives are to facilitate the best speech and language that the communicatively impaired child can achieve.

**General Attitudes of Teachers Toward Handicapped Children**

For many years, public schools, as well as American society responded to the needs of handicapped children by an out of sight, out of mind philosophy (Alexander & Strain, 1978). Alexander and Strain (1978) noted from a review of existing literature that society cannot deny that prejudice and negative attitudes exist.

Teachers' attitudes toward the student are extremely important in determining the classroom atmosphere. Research has shown that teachers' expectations influence how much pupils will learn (Sprinthall & Sprinthall, 1977). Gearheart and Weishahn (1976) stated that teachers have a profound effect on the student's behavior and achievement. Moreover, teachers' attitudes can either facilitate or impede students' success in school. Rosenthal and Jacobson (1968) conducted one of the first studies to determine if teacher expectation and/or attitudes affect pupil progress. The study suggested that children behave and perform based on teacher expectation and attitudes. Teachers typically feel less accepting toward handicapped children than they feel toward normal children (Haring, 1958).

More recently, a review by Alexander and Strain (1978) found that teachers do not perceive Educable Mentally
Retarded (EMR) children as having the cognitive skills needed to succeed in academic classes. Teachers also perceived the EMH child's behavior as being more unruly than a normal child's behavior, and viewed handicapped children as a disruptive element in the regular classroom.

According to Shotel et al. (1972) teachers preferred the learning disabled to the emotionally disturbed, and viewed educable mentally retarded least favorably. Combs and Harper (1967) examined teachers' responses to labels and found that psychotic disorders were interpreted more negatively by teachers than mental retardation, or neurological syndromes. Harasymiw and Horne (1976) found that teachers' attitudes generally parallel the general public's negative and stereotyped attitudes.

Alexander and Strain (1978) noted that much is documented about handicapped students' skills and abilities but research is lacking on educator's perception and attitudes, but overall studies indicated that regular classroom teachers may hold less than favorable attitudes toward handicapped students in the regular classroom. Thus, assuming that teachers view handicapped students in the classroom as less able academically, socially, and as a behavior problem and if Rosenthal's (1968) self-fulfilling prophecy theory holds true, handicapped children are likely to be more unruly, less able academically, and socially.
Specific Attitudes of Teachers Toward Communicatively Handicapped Children

Signoretti and Oratio (1981) stated that previous studies suggested that classroom teachers have distinct perceptions of speech language pathologists, speech and language programs, and communicatively impaired children. Phelps and Koenigsknecht (1977) surveyed teachers, speech language pathologists, and principals and found that various educators' attitudes toward speech and language programs were moderately favorable. All respondents agreed: 1) the caseload size was too large to provide adequate services; 2) the time allotted to each child was insufficient; and 3) many educators were apathetic toward speech and language problems. Specifically, the study found that teachers in the primary grades are more positive toward communicatively handicapped students than middle school and secondary school teachers.

Ruscello et al. (1980) conducted a study similar to the one previously noted. An attitude scale was administered to 113 educators in two rural school systems and found educators have moderately favorable attitudes toward their respective speech and language programs and the students enrolled in them. Ruscello et al. (1980) also indicated that educators believed that children seen for remediation in special education classes are more likely to present severe articulation and language problems while children from regular classes would primarily present mild
to moderate articulation problems along with disorders of voice, fluency, and language.

Clauson and Kopatic (1975) had 50 regular classroom teachers rate recorded speech samples obtained from communicatively impaired students and normal students and found that teachers have somewhat less favorable attitudes toward school speech language programs and pathologists. Specific results from the study indicated that 14 percent of the teachers felt communicatively impaired children were less able academically than normal speaking peers. 44 percent of the teachers felt there was no difference, and 12 percent stated they did not know.

Davis et al. (1981) conducted a study regarding school personnel perception toward hearing impaired students, 847 questionnaires were analyzed. Results of the study indicated that classroom teachers felt hearing impaired students have academic difficulties, 25 percent and 33 percent have behavior and/or social problems, respectively. In addition, Davis' study indicated that classroom teachers generally believed hearing impaired children were having fewer problems than other school specialists.

Phillips (1976) conducted research to investigate 10 variables that might affect the classroom teacher's understanding of speech and language disorders. Results indicated that variables such as age, professional training, years of teaching experience, and access to the speech and
language pathologist affect teachers' attitudes and knowledge of communication problems. Specifically, Phillips found that younger teachers have more positive attitudes toward communicatively impaired students and have better understanding of communication disorders and remediation.

Signoretti and Oratio (1981) surveyed 147 teachers and found three variables which influenced their attitudes toward communicatively impaired students. Variables were related to peer relationships, classroom behavior, and emotional development. The results indicated that teachers have distinct attitudes toward communicatively impaired children.

Bennett and Runyan (1982) surveyed educators to determine the effects of communication disorders or impairments upon a child's educational performance. Results indicated that 66 percent of the 282 responding educators indicated that communication impairments adversely affected some aspect of education performance (i.e., academic and/or social). The results of the study also indicated that articulation and stuttering disorders were viewed as having greater effect on educational performance than did articulation-language, language or voice disorders.

Survey Analysis

Selltiz et al. (1967) noted that early in the researcher's planning the merits of several methods of data collection
must be weighed before deciding on one in particular. Assuming the investigator decides to use a questionnaire the entire construction process can be divided into the following six steps:

1. determining the type of information that should be sought;
2. determining the type of questionnaire that should be used;
3. writing the first draft;
4. re-examination and revision of questions;
5. pretesting and editing the questions; and
6. specifying procedures for use (p. 546).

In addition, Selltiz et al. suggested that consideration of the following points when formulating questions for a questionnaire.

1. Sentence structure should be short, simple, and free of ambiguity.
2. More personalized wording of the statements produce better results.
3. Determine the best format to employ concerning the form of response.
4. Questionnaires should be of reasonable length.

Research by Selltiz et al. (1967) indicated that short and simple questions are superior to longer ambiguous items. Second, survey instruments produce better results if personalized formats are utilized. The most personal form of questions probably elicit a more individual expression
of feeling. Impersonal questions probably elicit responses based on what the respondent supposes other people think. Third, the scale formats frequently give investigators more accurate information than dichotomous (i.e., yes-no, agree-disagree, do-do not) formats. The reason that dichotomous responses were considered inadvisable was because they provide an attractive escape for respondents who are disinclined to express a definite view. Fourth, one page questionnaires are believed to be most accurate, since they can be completed relatively quickly, without overwhelming or placing additional burdens on the respondents.

Statistical Analysis

Smith (1970) noted that a parametric test involves assumptions about the normal form and characteristics of larger experimental selected populations. Parametric tests take into account the exact scores involved in the compared groups. Conversely, nonparametric tests do not depend on the exact size of individual scores, but only the general rank order in which they appear in a scale.

McCollough (1974) indicated that nonparametric tests are also referred to as distribution free tests. McCollough also noted that distribution free tests have almost the same power as the parametric t tests and F tests. The nonparametric Wilcoxon matched pairs signed ranks test is used to correlate levels of significant difference for match pairs when differences can be ranked across cases.
Summary

As a result of the changing structure in the schools, speech language pathologists and classroom teachers have needed to function as a team more than ever before. A review of existing research described a number of responsibilities that exist for both speech language pathologists and teachers. In addition, research also indicated that certain variables influence perceptions held by educators toward handicapped children.
CHAPTER III
METHODS AND PROCEDURES

Introduction

This chapter describes the participants involved in the study and notification procedures. In addition, the instrument used for purposes of data collection and statistical procedures used for the analysis of data are also described.

In order to determine if regular classroom teachers perceive communicatively impaired students differently from their peers a written questionnaire was distributed to elementary school teachers in kindergarten through fifth grades. The degree of correlation between ratings of the communicatively impaired students and normal students was correlated using the Wilcoxon matched pairs signed ranks test. The .05 level of significance was used as criterion for determining significance of the data.

Selection of Participants

The participants in this study were teachers of selected students in Watauga County Schools. Two groups of students were selected by contacting area school speech language pathologists and principals. The initial step, in the selection process of the teachers, was to obtain a
listing of students enrolled in the school's speech language program who were not enrolled in any other rehabilitative or habilitative program, i.e., reading, special education, hearing impaired, and/or gifted or talented. Thirty-five students served as the communicatively impaired group. The speech language pathologist gave the names of the students' regular classroom teachers. Twenty-three regular classroom teachers were the participants in this study. The second group of students was obtained by contacting the principals in the four target schools and selecting students from the class rolls of the 23 selected teachers. For the purpose of this study students were omitted from the sample if they were enrolled in the school's speech and/or language program, reading program, special education program, hearing impaired program, and/or gifted and talented program. Thereafter, students were selected by means of a simple random selection (Best, 1981). Each child had an equal opportunity to be selected. Thirty-five students served as the normal peer group. The two selection procedures resulted in the selection of at least two students from the same classroom, the first group identified as communicatively impaired students and the second group randomly identified non-communicatively impaired students. The teachers were then identified as the subjects for this study.
Notification Procedures

The 23 teachers were personally contacted during the first and second weeks of April. Each teacher was presented with a letter of introduction, thesis project, and endorsement from the principal (See Appendix A). The purpose of the study was briefly explained and teachers were asked if they would participate in the study. Specific questions were not answered until after teachers had completed the questionnaire on students selected from their classroom.

Instrumentation

This study used a questionnaire to measure teachers' perception toward communicatively impaired students as compared to normal peers. The questionnaire used in this study was derived from a modification of a questionnaire found in Studies in Educational Psychology, measuring "Teachers' Responses to Different Children" (Kuhlen, 1968). The 24 item questionnaire consisted of 12 positive statements and 12 negative statements (See Appendix B). Teachers were to respond to each question by means of a six point Likert scale: always; often; sometimes; occasionally; seldom; and never, in which participants were instructed to indicate their preference. A six point scale was used since it causes the respondent to choose an answer on one end of the scale. Research indicated that an even numbered Likert scale enables the research to gather more conclusive
information (Best, 1981). In addition, the questionnaire met many of Selltiz's et al. (1967) guidelines.

**Survey Analysis**

The statements used to develop the questionnaire generally dealt with the teachers' perception toward students both positively and negatively, i.e., the respondents would be indicating a more favorable perception by indicating either the always, often, or sometimes options. Positive statements were numbers 2, 3, 8, 9, 11, 12, 13, 14, 16, 17, 18, and 22. Twelve of the statements were rated as negative, i.e., the respondent would be indicating a more favorable perception by indicating either the occasionally, seldom, or never options. Negative statements were numbers 1, 4, 5, 6, 7, 10, 15, 19, 20, 21, 23, and 24.

The statements used in developing the questionnaire generally dealt with classroom behavior and situations. Specifically, the positive statements dealt with choosing a child to take a leading part in a classroom project, putting a child's work on the bulletin board, praising a child for neat writing, keeping the room clean, bringing things to class for his peers to see, trying hard, and so on. In addition, the negative statements dealt with scolding a child for whispering, being out of their seat, disrupting class, not paying attention, not completing work on time, and so on.
The statement items for the questionnaire were personalized in hopes of obtaining more accurate results. The most personal form of statements probably elicit a more individual expression of feelings (Selltiz, et al., 1967). In addition, statements are presented in a random order in hopes of eliminating any cues that might have enabled the participants to infer the purpose of the study. Due to classroom teachers' limited planning time and vigorous class schedule one page questionnaires were believed to be most accurate, since they can be completed relatively quickly. Teachers' responses were believed spontaneous thus, assuming they had not received previous notice or any information concerning the study from the speech language pathologist or other school personnel.

Statistical Analysis

The Wilcoxon matched pairs signed ranks test was used to obtain a correlation between the two groups of subjects. According to Willemsen (1974) the Wilcoxon is used for matched pairs and when differences between the two groups can be ranked across cases. The requirements for using the Wilcoxon are: 1) participants must be carefully matched before being exposed to the treatment; 2) participants must be related in some way; 3) participants must serve as their own control in a pretest-posttest design (Huck, et al., 1974). The participants in this study met these requirements.
The Wilcoxon gave the number of teachers giving the same responses for the communicatively impaired students and the normal students (called a tie), the number of teachers responding differently for the two groups in a negative direction, the number of teachers responding differently for the two groups in a positive direction. The Wilcoxon also calculated the probability.
CHAPTER IV
RESULTS OF THE STUDY

Introduction
Data obtained from the questionnaires completed by regular classroom teachers for both communicatively impaired children and normal children are presented in both tabular and narrative form. Twenty-three classroom teachers in four elementary schools were used in the study. Each teacher completed at least two, 24 item questionnaires, one for the impaired group and the normal group.

Analysis of Data
The Wilcoxon matched pairs signed ranks test was used to determine the correlation between the teacher's responses to the questionnaires completed for the impaired group and the normal group. The difference (negative or positive) between the responses for each group was calculated. If the two responses in a pair were the same (i.e., ties), then the difference \(d\) = 0 and the pair was deleted from the analysis. The \(d\)'s were then ranked without regard to sign (negative or positive). The smallest \(d\) was assigned a rank 1, the next smallest \(d\) was assigned a rank 2, and so on.

Table 1 shows the frequencies that teachers responded to each item on the questionnaire for the impaired
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MC = Missing Cases
group and normal group. Table 1 also shows the number of times in which classroom teachers chose each option in questions one through 24.

Table 2 shows the number of cases per sex for the impaired group and the normal group. "Cases" refer to the number of pairs of both communicatively impaired children and normal children. Tables 3, 4, and 5 show the number of cases for each grade, school, and teacher.

Table 6 shows the data obtained from the statistical analysis. Column one contains the questions asked. In column two the number of cases are listed. "No response" and "missing cases" from the questionnaires were not used in the statistical analysis. Therefore, if the teacher chose not to answer the question, the question was not ranked for that pair of students.

Column three contains the number of ties. "Ties" refer to the number of teachers who gave the same response for both the impaired and the normal group. "Negative rank (-Rank)" refers to the number of teachers who perceived a response differently for the impaired group and normal group but in a negative direction. "Positive rank (+Rank)" refers to the number of teachers who perceived a response differently for the impaired group and normal group but in a positive direction. The Wilcoxon computes a z score which is in column six. Column seven refers to probability. The probability indicates the level at which the results were due to chance at the .05 level of significance.
TABLE 2

Number of Cases per Sex

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<th>Impaired Group</th>
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<td>( F = 14 )</td>
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<td>( M = 15 )</td>
<td>( M = 21 )</td>
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TABLE 3

Number of Cases per Grade

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35
TABLE 4

Number of Cases per School

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TABLE 5

Number of Cases per Teacher

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</tr>
<tr>
<td>Behavior</td>
<td>35</td>
<td>26</td>
</tr>
<tr>
<td>Untidy papers</td>
<td>35</td>
<td>13</td>
</tr>
<tr>
<td>Disrupting</td>
<td>35</td>
<td>14</td>
</tr>
<tr>
<td>Raising hand</td>
<td>35</td>
<td>11</td>
</tr>
<tr>
<td>Right answer</td>
<td>34</td>
<td>7</td>
</tr>
<tr>
<td>Things ready</td>
<td>35</td>
<td>12</td>
</tr>
<tr>
<td>Paying attention</td>
<td>35</td>
<td>13</td>
</tr>
</tbody>
</table>

*Significant difference
Results

The results of the analysis showed that four out of the 24 questions demonstrate a significant difference between the responses for the impaired and the normal group at the .05 level of significance (Questions 9, 12, 14, and 23). Questions 9 and 23 show a significant difference between the responses of the teachers for the impaired group and the normal group at the .01 level of significance. The overall result of the study indicated that classroom teachers perceive communicatively impaired students differently based on data obtained from this study. Therefore, the null hypothesis, there is no significant difference in teachers' perception of communicatively impaired students as compared to normal peers in the same classrooms at the .05 level of significance, was rejected. Specifically, the data from this study indicated a significant difference concerning the following areas: 1) choosing communicatively impaired children to take leading parts in class projects; 2) choosing communicatively impaired children to help other children with their work; 3) praising communicatively impaired children's work as being neat; and 4) asking communicatively impaired children to get things ready to begin work.
CHAPTER V

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to determine if public school teachers perceive communicatively impaired children differently when compared with normal peers in the same classrooms. Twenty-three regular classroom teachers completed a 24 item questionnaire on 70 children, 35 communicatively impaired students and 35 normal peers. The classroom teachers served as subjects for the study. The instrument used in the study was a 24 item questionnaire asking a variety of questions concerning general classroom behavior and situations. Teachers were asked to respond to questions using the following six point scale: always, often, sometimes, occasionally, seldom, and never. The Wilcoxon matched pairs signed ranks statistical analysis was used to compute and analyze the data.

Based on the results, the following four items were perceived significantly different at the .05 level of significance. Items perceived differently were: 1) taking a leading part in a class project; 2) helping other children with their work; 3) turning in neat work; and 4) having things ready when it is time to begin work.
Implications of the Study

In order to have an effective speech-language program, speech language pathologists and classroom teachers must work as a team supporting and reinforcing both the speech-language program and the classroom curriculum. Cooperation between regular classroom teachers and speech language pathologists result in effective programs not only for communicatively impaired students but for all students. Likewise, regular classroom teachers need to support and reinforce speech-language development in the regular classroom.

It appears from the results of this study that classroom teachers do differ in their perception of the communicatively impaired group when compared with the normal group. The data from this study imply the following:

1. Regular classroom teachers do not choose communicatively impaired children to take leading parts in class projects as often as they do normal peers.
2. Regular classroom teachers do not choose communicatively impaired children to help other children with their classwork as often as they do normal peers.
3. Regular classroom teachers do not praise communicatively impaired children's work as being neat as often as they do normal peers.
4. Regular classroom teachers need to ask communicatively impaired children to get their things ready
to begin work more often than they do normal peers.

**Recommendations**

Speech-language pathologists should conduct periodic and regular in-service workshops concerning characteristics of speech and language disorders and various aspects of the speech and language program. In-service workshops are one of the best ways for speech-language pathologists to share information concerning general characteristics of communicatively impaired children and speech and/or language impairments. Classroom teachers, special education teachers, reading specialists, principals, and other school personnel who come in contact with communicatively impaired children should be invited and encouraged to attend all workshops. Suggested workshops may include:

1. speech and language development;
2. speech and language disorders;
3. identification and referral of communication disorders;
4. effects of communication disorders on a child's academic, behavioral, and social development;
5. suggestions to facilitate speech-language development in the classroom; and
6. suggestions to facilitate carryover in the classroom.

In addition, in order to supplement the workshops speech
language pathologists should consider modeling various techniques and suggestions to facilitate language development in the classroom.

Second, speech language pathologists should schedule regular and periodic formal and informal meetings with classroom teachers to discuss individual children, their unique characteristics and problems, and their particular speech and language program. These meetings should enable the speech language pathologist to share information with classroom teachers concerning individual children and their capabilities within the classroom. Conversely, these meetings would enable speech language pathologists to better understand the classroom curriculum and how children function in the classroom program. A series of formal and informal meetings should be scheduled throughout the year to enable both regular classroom teachers and speech language pathologists to share and receive important information.

Third, speech language pathologists should inform classroom teachers of particular speech-language program goals. Since classroom teachers spend the majority of the day with communicatively impaired children and have the needed opportunities to reinforce and facilitate carryover it is imperative that teachers be aware of individual program goals. In addition to being aware of specific speech and/or language goals, teachers need to be informed of the best ways of facilitating carryover of those speech language
goals. Moreover, it is just as important for classroom teachers to be aware of what communicatively impaired children are capable of doing with regard to individual speech-language impairments and be informed of progress made within the program. Additionally, since classroom teachers are in contact with children during the majority of the day, teachers need to be aware of situations that communicatively impaired children may not function well in and that may call additional attention to children's speech and/or language problems. It is imperative that regular classroom teachers be able to discuss any situation with the class in simple, honest, understanding, and accepting terms.

The teachers' perception of communicatively disordered children investigated in this study is only one of the many aspects that may influence the speech and/or language program that teachers should be aware of. In addition, the previously mentioned recommendations are but few of the ways that speech language pathologists can and/or should interact with teachers to increase their awareness of communication disorders and communicatively impaired children. It is imperative for speech language pathologists to make teachers and all school personnel aware of these and many more aspects of the school speech and language program in order to attain their much needed support and cooperation.
In summary, in order to have an effective speech-language program, speech language pathologists, classroom teachers, and all school personnel must work as a team supporting and reinforcing both the speech-language program and the classroom curriculum. Cooperation between regular classroom teachers and speech language pathologists result in effective programs for all students. Awareness is the essential factor that creates realistic expectations toward communicatively impaired children.

Recommendations for Future Research

The following suggestions are made for future research:

1. This study should be replicated on a larger sample to corroborate the present findings.

2. This study should be replicated using speech-language impaired children who are also enrolled in other special programs (i.e., reading, special education, gifted-talented, etc.).

3. This study should be replicated using children not receiving speech-language services but enrolled in other special programs (i.e., reading, special education, gifted-talented, etc.).

4. This study should be replicated using principals, special educators, reading specialists, and/or guidance counselors.

5. This study should be replicated on a larger sample to establish validity of the questionnaire.
6. This study should be replicated on a larger sample to establish reliability of the questionnaire.

7. This study should be replicated with regular classroom teachers, speech language pathologists, and special educators.

8. This study should be replicated in order to correlate findings obtained from the questionnaire with findings obtained from classroom observation.

9. The following revisions of the questionnaire in this study should be made for future research:
   a. The word "scold" should be deleted from each statement where it appears and should be replaced by the word "correct" or some other word that does not carry negative connotations.
   b. Question 6, "I suspect this child when something happens while I am out of the room", should be omitted from the survey because teachers reported that they never leave their classrooms unattended. An aide is always present.
   c. Question 7, "I point out this child for not doing his/her best work", should be changed to "I talk to this child for not doing his/her best work".
   d. Question 23, "I speak to this child for not having things ready to begin work", should be
changed to "I ask this child to get things ready to begin work."

10. A study should be conducted to determine if perceptual differences exist between male and female communicatively impaired students.

11. A study should be conducted to determine if perceptual differences exist between younger (i.e., K-4 grades) and older (i.e., 5-8+ grades) communicatively impaired students.

12. A study should be conducted to determine if perceptual differences exist based on years of teaching experience.

13. A study should be conducted to determine if perceptual differences exist based on type of communicative disorder(s) (i.e., language, articulation, fluency, hearing, and/or voice).

14. A study should be conducted to determine if perceptual differences exist based on severity of communicative disorder(s) (i.e., mild, moderate, severe, or profound).

15. A study should be conducted to correlate the differences, if any, before and after inservice workshops.

**Summary of the Study**

Based on the results of this study, it is evident that classroom teachers perceive communicatively impaired
children differently when compared with normal peers in the same classrooms. Awareness is the major factor that influences teachers' perception of communicatively impaired children. In addition, information is equally important in making classroom teachers more supportive of the speech-language programs in the schools. In-service educational workshops are one of the most effective ways of increasing teachers' awareness and understanding of communicatively impaired students. Periodic meetings with classroom teachers and invitations to observe speech and/or language therapy sessions are other effective ways of increasing teachers' awareness of communication impairments and changing teachers' perception toward communicatively impaired students.
BIBLIOGRAPHY


Lloyd, G.W. & Ainsworth, S. (1954). The classroom teacher's activities relating to speech correction. Journal of Speech and Hearing Disorders, 19, 244-249.


APPENDICES
TO: ______________________

FROM: Pam Goodman, Graduate Student
       Appalachian State University

DATE: April 2, 1984

SUBJECT: Thesis Project

This memo is an introduction to me and my thesis project for graduate school. I am requesting that you complete the attached questionnaire on some of your students for the purpose of validation of the survey. I will explain in more detail with you the purpose of the study once they are completed.

All data, students, and teachers will be kept in strictest confidence and only the final results will be reported. I will share with you the final results at completion of the study.

Thank you for your cooperation.

__________________________________________________

I endorse Ms. Goodman's study and encourage your support.

__________________________________________________

This study has been approved by Dr. Propst and Ms. Monnie Roten.
APPENDIX B

NAME: ___________________________ GRADE: __________

DIRECTIONS: Please indicate your reaction to the following statements using these alternatives:

1 = ALWAYS
2 = OFTEN
3 = SOMETIMES
4 = OCCASIONALLY
5 = SELDOM
6 = NEVER

Please complete all items by circling your choice based on your first reaction. All information provided will remain confidential. THANK YOU.

1. I send this child to the principal's office to be punished.
   1 2 3 4 5 6

2. I praise this child for having his/her work done on time.
   1 2 3 4 5 6

3. I praise this child for good writing on all papers handed in.
   1 2 3 4 5 6

4. I scold this child for being out of his/her seat.
   1 2 3 4 5 6

5. This child stays in the room during recess to finish his/her work.
   1 2 3 4 5 6

6. I suspect this child when something happens while I'm out of the room.
   1 2 3 4 5 6

7. I point out this child for not doing his/her best work.
   1 2 3 4 5 6
8. I put this child's work on the bulletin board.
   1 2 3 4 5 6

9. I would choose this child to take leading parts in a
class project.
   1 2 3 4 5 6

10. I scold this child for whispering.
    1 2 3 4 5 6

11. I praise this child for trying hard.
    1 2 3 4 5 6

12. I choose this child to help other children with their
    work.
    1 2 3 4 5 6

13. I praise this child for helping keep the room clean.
    1 2 3 4 5 6

14. I point out this child's work as being very neat.
    1 2 3 4 5 6

15. I scold this child for wasting too much time.
    1 2 3 4 5 6

16. I praise this child for bringing things to school for
    the class to see.
    1 2 3 4 5 6

17. I ask this child to do errands for me.
    1 2 3 4 5 6

18. I praise this child because his/her behavior has
    improved.
    1 2 3 4 5 6

19. I scold this child for handing in untidy papers.
    1 2 3 4 5 6
20. I scold this child for disrupting class.

21. I scold this child for talking without raising his/her hand.

22. I call on this child when I want the right answer.

23. I speak to this child for not having things ready to begin work.

24. I scold this child because he/she pays little attention to what is going on in class.
VITA

Pamela Jean Goodman was born in Jefferson, North Carolina on September 24, 1961. She graduated from Beaver Creek High School in June, 1979. The following August, she entered Appalachian State University and in May, 1983, received a Bachelor of Science degree in Speech Pathology and Audiology. Ms. Goodman began graduate school at Appalachian State University in May, 1983. In the fall of 1983, she accepted a graduate assistantship in the Department of Speech Pathology and Audiology. She is a member of Kappa Delta Pi, Gamma Beta Phi, and National Student Speech, Language, and Hearing Association. The Master of Arts degree was awarded in August, 1984.

Ms. Goodman's address is Route 2, Box 35, West Jefferson, North Carolina 28694. Her parents are Mr. and Mrs. Kenneth Gene Goodman of West Jefferson, North Carolina.