

A COMPARISON OF THREE ADOLESCENT LANGUAGE SCREENING TESTS

A Thesis

bу

Carolyn Cameron

Submitted to the Graduate School

Appalachian State University

in partial fulfillment of the requirements

for the degree of

MASTER OF ARTS

May 1986

Major Department: Language, Reading, and Exceptionalities

William Leonard Eury Appalachian Collection

A COMPARISON OF THREE

ADOLESCENT LANGUAGE SCREENING TESTS

A Thesis

bу

Carolyn Cameron

May 1986

APPROVED BY:

Edward C. Hutchinson
Chairperson, Thesis Committee

R. Jane Lieberman
Member, Thesis Committee

J. Pat Knight
Member, Thesis Committee

Edward C. Hutchinson
Chairperson, Department of Language,
Reading, and Exceptionalities

Jayre V. Lawrence
Joyce V. Lawrence

Dean of Graduate Studies and Research

Copyright by Carolyn Cameron 1986 All Rights Reserved

ABSTRACT

A COMPARISON OF THREE

ADOLESCENT LANGUAGE SCREENING TESTS (May 1986)
Carolyn Cameron, B.S., Appalachian State University

M.A., Appalachian State University

Thesis Chairperson: Edward C. Hutchinson

The purpose of this study was to examine the differences in performance and pass/fail rates on the Clinical Evaluation of Language Functions, Advanced Level Screening Test (CELF) (Wiig & Semel, 1980b), the Screening Test of Adolescent Language (STAL) (Prather, Breecher, Stafford, & Wallace, 1980), and the Adolescent Language Screening Test (ALST) (Morgan & Guilford, 1984).

The subjects were 30 seventh grade students from a public elementary school in Watauga County, North Carolina. Their ages ranged from 11 years 0 months to 13 years 1 month with a mean age of 12 years 5 months. Each test was administered individually according to standardized procedures.

Performance on the CELF, the STAL, and the ALST was analyzed by means of a one-way analysis of variance.

Results of this analysis showed no significant difference between overall performance on the three tests (\underline{F} = .44, \underline{df} = 2/87, \underline{p} = <.05).

Differences in the pass/fail rates were tested by applying a Chi Square analysis. The results of this analysis showed no significant difference between the pass/fail rates.

These results appeared to indicate that there is a marked degree of correspondence between the three tests. On the basis of these findings, it is suggested that any one of the three tests will provide similar information about the language performance of seventh grade students.

ACKNOWLEDGEMENTS

The author would like to express her sincere thanks to Dr. E.C. Hutchinson, Dr. R. Jane Lieberman, and Dr. Pat Knight for their support and assistance throughout the writing of this thesis. Thanks is also given to Jane Lawrence, Arzella Washburn, and Laura Hollifield for their cooperation and help with the testing.

Special appreciation goes to Dr. Joe Miller, Ms. Susan Parker, the teachers, and the seventh grade students at Parkway School for their cooperation and interest in this study.

DEDICATION

Dedicated to my parents, grandparents, and members of the Salem Church Community who have supported me through my years of college.

TABLE OF CONTENTS

	Page
ABSTRACT	.iv
ACKNOWLEDGMENTS	.vi
DEDICATION	.vii
LIST OF TABLES	. x
Chapter	
1. INTRODUCTION	. 1
Statement of the Problem	. 1
Purpose of the Study	. 3
Delimitations	. 3
Limitations	. 4
Hypotheses	. 4
Definitions	. 5
2. REVIEW OF RELATED LITERATURE	. 6
What is Adolescence?	. 6
Language Disorders of the Adolescent	. 7
Screening	. 8
3. METHODS AND PROCEDURES	.10
Subjects	.10
Methods	.10
Analysis of Data	.11
Instruments	.12

4.	RESULTS OF THE STUDY
	Results17
	Analysis27
5.	SUMMARY, DISCUSSION, AND RECOMMENDATIONS31
	Summary31
	Conclusions32
	Implications32
	Recommendations33
BIBLIOGRA	АСИЧ
APPENDIC	SS38
	A. Permission To Test Letter39
	B. Order of Testing41
VTTA	4.2

LIST OF TABLES

Γable	Page
1.	Individual Raw Scores on the CELF18
2.	Individual Raw Scores on the STAL21
3.	Individual Raw Scores on the ALST24
4.	One-Way Analysis of Variance for the CELF, the STAL, and the ALST28
5.	Chi Square Analysis of Pass/Fail Rates on the CELF, the STAL, and the ALST29
6.	Number and Percentage of Passing Scores on the CELF, the STAL, and the ALST30

CHAPTER 1

INTRODUCTION

Statement of the Problem

Assessment of language disorders in adolescents involves at least two discrete tasks. The first is screening, and the second is evaluation (Prather, 1984). Cross (1977) defines screening as a measurement of activity which identifies in the general population those children who appear to be in need of special services in order to develop to their maximum potential. Following screening, evaluation is used to determine whether a communication problem exists, document the nature and extent of the problem, and program remedial or compensatory training (Prather, 1984).

Screening students for all types of communication disorders is an important task in school settings (Prather, 1984). In some school districts, routine screening occurs at certain grade levels and standardized screening tests are used. In other districts, more reliance is placed on teacher and parent referrals (Prather, 1984). Tibbits (1982) suggests that the entire adolescent population be screened at least twice after they leave the sixth grade. Screening at the adolescent age level is important because this is one

of the final opportunities a student has to be screened while still attending school. Language deficits may go undiagnosed because of inadequacies in the testing program used by the school's speech and language pathologist, or because of a lack of speech and language services in previous school years.

Language deficits which begin early in life and go untreated may persist into young adulthood and emerge in later life (Wiig & Semel, 1980a). They tend to emerge in new circumstances, such as a new line of study, a new job, or a promotion and place different and unexpected demands upon language processing and use in speaking and writing (Wiig & Semel, 1980). By screening the adolescent population for language deficits, there is a better chance of discovering those students with language problems. order to develop an effective screening program, a speech-language pathologist must choose a reliable screening instrument. Commercial screening instruments for adolescent language have been recently developed and are now widely available to speech-language pathologists. Because these available instruments are new, care must be taken to choose an adequate and appropriate one.

Research focusing on adolescent language has lagged behind that undertaken with younger children (West, 1985). A primary reason for this was the unavailability of standardized, reliable, and valid assessment devices that could provide a comprehensive view of adolescent language

3

behavior (Hammill, Brown, Larsen, & Wiederholt, 1980). Few studies of adolescent language were undertaken before the enactment of Public Law 94-142. This law mandated the provision of services for the handicapped from 3 to 21 years of age (U.S.O.E.,1977). Since Public Law 94-142 has been enacted, a number of adolescent language diagnostic and screening tools have been developed and are in use today. At the present time, the only available screening instruments for use in clinical research with the adolescent population are The Clinical Evaluation of Language Functions (CELF) (Wiig & Semel, 1980b), The Screening Test of Adolescent Language (STAL) (Prather, Breecher, Stafford, & Wallace, 1980), and Test (ALST) (Morgan & Guilford, 1984).

Purpose of the Study

The CELF, the STAL, and the ALST were designed as specific screening tools for the adolescent population. The purpose of this study was to examine the relationship of performance on the CELF, the STAL, and the ALST. As a result, answers to the following questions were sought:

- 1. Is there a significant difference in performance on the three adolescent language screening tests?
- 2. Are the pass/fail rates similar across the three tests?

Delimitations

1. This study was limited to 30 seventh grade students in rural Watauga County, North Carolina.

2. The test protocol involved individual administration of the CELF, the STAL, and the ALST by the experimenter and three additional examiners, all graduate students in Speech Pathology.

Limitations

- 1. Generalizations should be made with care from this study due to the limited population tested, and the convenience of the population tested.
- 2. An order effect may have influenced test results since only partial counterbalancing was achieved in the testing protocol.

Hypotheses

The following hypotheses in null form were developed for this study and tested at the .05 level of significance.

- Ho 1 There is not a significant difference between overall performance on adolescent language screening tests.
- 1.1 There is not a significant difference between overall performance on the CELF and the STAL.
- 1.2 There is not a significant difference between overall performance on the CELF and the ALST.
- 1.3 There is not a significant difference between overall performance on the STAL and the ALST.
- Ho 2 There is not a significant difference between pass/fail rates on adolescent language screening tests.
- 2.1 There is not a significant difference between pass/fail rates on the CELF and the STAL.

- 2.2 There is not a significant difference between pass/fail rates on the CELF and the ALST.
- 2 .3 There is not a significant difference between pass/fail rates on the STAL and the ALST.

Definitions

- 1. Language- A system of symbols that are socially agreed upon and governed by rules which are used to represent one's knowledge of the world (Gerber & Bryen, 1981).
- 2. Adolescence- The period of time beginning at puberty and ending with the beginning of adulthood (Tibbits, 1982).

CHAPTER 2

REVIEW OF RELATED LITERATURE

What is adolescence?

Some professionals believe that adolescence begins at puberty and ends with the beginning of adulthood (Lerner, 1981, p. 16). Adolescence is a period of extreme change in a young person's life. The ages in which the most changes occur are ten to fourteen (Swaim, 1982). Dramatic changes occur in every aspect of one's being.

As a result of these far reaching changes, the adolescent becomes less dependent on the family and importance is placed on developing relationships within the peer group which serves as a support system (Cook, 1979). Studies which compare the social relationships of children with language disabilities and normal children have revealed that children with language disabilities are more likely to be rejected by peers and considered less adequate by others (Bryen, 1977). Throughout this period of change, adolescents are striving to develop a sense of their own being.

By adolescence, the individual recognizes the status value of speech and uses it to create in the minds of others the image of oneself that one wants them to have (Hurlock,

1973). Tonal quality, pronunciation, choice of words used, and the correctness of usage all create an impression on others and relay information about the speaker (Hurlock, 1973). The verbalizations people make of and about themselves, "self-talk", are symbols of the way they evaluate themselves (Lipsett, 1958). Speech and language development and usage during the adolescent years set trends for later life. The development of personality, emotions, and self-esteem are influenced by adolescents' development of speech and language.

Language disorders of the Adolescent

A language disorder exists when a person has problems in the normal development of language, including listening comprehension and oral expression (Tibbits, 1982). Common disorders of language among adolescents include:

- 1. Word finding difficulties. This may result from having an inadequate working vocabulary, the inability to join word meanings at the sentence level as opposed to the single word level, or poor storage and retrieval of information from memory.
- 2. <u>Deficits in social perception.</u> The adolescent is often accused of saying the wrong thing at the wrong time.
- 3. <u>Inability to handle figurative language.</u> The adolescent cannot step beyond the literal meaning of words (Tibbits, 1982).

Language disordered adolescents often show additional characteristics associated with actions both at school and at home. These include avoidance of tasks, impulsivity, emotional swings, overreaction, disorganized study habits, poor use of time, and lack of attention (Lerner, 1981, p. 464). These behavioral characteristics are usually a direct result of disorders in language.

Screening

Screening is the process of finding in the general population those individuals who may have oral language disorders (Tibbits, 1982, p. 25). Screening yields information about the adolescent's language development and this information is used to identify those students in need of further evaluation and subsequent diagnosis of the language disorder (Tibbits, 1982). At times enough information may be obtained during the screening to warrant recommendations for immediate therapeutic intervention (Aram & Nation, 1977).

The entire adolescent population should be screened at least twice after they leave the elementary school (sixth grade) (Tibbits, 1982, p. 26). The screening procedures should be administered by a qualified speech-language pathologist or supportive personnel working under the supervision of the speech-language pathologist (Tibbits, 1982). The screening procedures should yield information about all areas of oral language (semantics, syntax, morphology, pragmatics) (Tibbits, 1982, p. 27).

There are several suggested criteria for the screening process. The first is that the screening should be standardized and administered in a standardized manner. The second criterion is that the screening test should be easily, quickly, and economically administered. A third is that they should accurately sort out the children who need further study with as few mistakes as possible (Nelson, 1981). With the implementation of Public Law 94-142, it is increasingly critical for professionals to be knowledgeable about the tests and materials available for use in the various steps of the diagnostic process (Nelson, 1981).

The screening process at the adolescent level is important. Many kinds of learning are dependent on language development and the individual's facility with verbal symbols (Lerner, 1981, p. 464). It is imperative to discover the adolescent with a language disorder at this stage of education. In order to identify the language disordered adolescent, valid and reliable screening instruments are necessary.

CHAPTER 3

METHODS AND PROCEDURES

Subjects

The subjects in this study were 30 seventh grade students selected from a rural elementary school in Watauga County, North Carolina. They ranged in age from 11 years 0 months to 13 years 1 month. The mean age was 12 years 5 months. To obtain these 30 participants, 73 Consent to Test forms (see Appendix A) were sent to the parents of each of the students. Thirty (41%) of the forms were returned, granting permission to test. The 30 students that received permission were tested.

Methods

The experimenter, a graduate student in Speech Pathology, was self-trained in the administration and scoring of the CELF, the STAL, and the ALST. Three additional examiners, all graduate students in Speech Pathology, were given a training session in which the experimenter reviewed each test individually with them, and required each examiner to administer a portion of each test to her. Through this examination, it was subjectively determined by the experimenter that each examiner could adequately administer each test.

Each subject was administered the CELF, the STAL, and the ALST in a single sitting. The individual administration of the CELF took approximately 15 minutes per subject; administration of the STAL took approximately 7 minutes; while administration of the ALST took approximately 10 to 15 minutes. The average time per subject to complete the testing was approximately 36 minutes.

Administration of all the tests required four testing sessions. The experimenter and the three examiners tested fifteen subjects the first day. Then the experimenter completed the testing over the following three days by administering the tests to five subjects each day.

The order of testing (see Appendix B) shows that 40% (12/30) of the students were given the CELF first, 27% (8/30) received the CELF as their second test, and 33% (10/30) were given the CELF as their final test. The STAL was given to 30% (9/30) as their first test, 27% (8/30) as their second, and 43% (13/30) as their third. The ALST was given to 30% (9/30) first, 47% (14/30) second, and 23% (7/30) third.

Analysis of Data

To compare the difference in performance on the three adolescent language screening tests, a one-way analysis of variance was performed. Differences in the pass/fail rates on the three tests were established using a Chi Square analysis.

Instruments

<u>Clinical Evaluation of Language Functions, Advanced Level</u>

<u>Screening Test</u> (CELF)

The Clinical Evaluation of Language Functions,

Advanced Level Screening Test (CELF) (Wiig & Semel, 1980b)

was designed to assist psychologists, educators, clinicians
and other professionals in identifying secondary level

students with possible language disabilities (Wiig & Semel,
1980b). The general purposes of the CELF are to screen the
language processing and production abilities of children,
grades 5 through 12, and to assist in the identification of
those children who may need in-depth assessment of their
oral language functions (Wiig & Semel, 1980b).

The CELF evaluates two areas of language: processing and production. In the processing section, 34 items present oral directions and require no verbal responses. In the production section, 18 items present spoken stimuli which require a spoken response. The CELF is given individually and requires approximately 15 minutes. The CELF was designed to screen for significant delays and potential deficits in aspects of language processing related to the perception, recognition, recall, and interpretation of spoken language. The test items probe selected aspects of the following:

- 1. Accuracy in phoneme discrimination;
- 2. Sentence formation rules (morphology and syntax);

- 3. Interpretation of words and logical relationships among sentence components and linguistic concepts;
- 4. Retention and recall of word and action sequences (Wiig & Semel,1980b, p. 8).

This test was also designed to screen for delays or deficits in aspects of language production related to the formulation, recall and retrieval, and production of language. The production screening items probe selected aspects or features of the following processes:

- 1. Agility and accuracy in phoneme production;
- 2. Ability to recall, identify, and retrieve words and concepts;
 - Accuracy in serial recall;
- 4. Immediate recall of model sentences (Wiig & Semel, 1980b, p. 17).

To establish concurrent validity on the CELF, children's performance was compared to their performances on commonly used measures of language abilities. The criterion measures selected were the (1) verbal subtests of the Illinois Test of Psycholinguistic Abilities (IPTA) (Kirk, McCarthy, & Winifred, 1968), (2) verbal subtests of the Detroit Test of Learning Aptitude (DTLA) (Baker & Leland, 1967) and (3) Northwestern Syntax Screening Test (NSST) (Lee, 1971). Pearson product-moment correlation coefficients were calculated to establish the concurrent validity (ITPA, r= .46, DTLS, r= .55, NSST, r=.47) (Wiig & Semel, 1980b).

Test-retest reliability was established by retesting 30^{-13} eighth grade students 3 to 4 weeks after the first testing. The

Pearson product-moment correlation coefficient between the two sets of scores was .84.

Screening Test of Adolescent Language (STAL)

The <u>Screening Test of Adolescent Language</u> (STAL)

(Prather et al., 1980) was designed to assist

speech-language pathologists in screening the adolescent

population for language deficits. The STAL was standardized

for students in sixth to ninth grade.

The STAL includes twenty-three items divided among four subtests: (1) Vocabulary (12); (2) Auditory Memory Span (3); (3) Language Processing (5); and (4) Proverb Explanation (3). The test is administered individually and requires approximately 7 minutes (Prather et al., 1980.)

The STAL measures both receptive and expressive language through four subtests. The vocabulary subtest requires word-finding and retrieval competencies. The auditory memory span subtest examines the aspect of memory span associated with related semantic and syntactic stimuli. The language processing subtest requires the student to decode a message and to use language for reasoning and problem solving. The proverb explanation subtest investigates paraphrasing and cognitive skills needed for verbal clarity (Prather et al., 1980).

Test-retest reliability was established by retesting thirty students approximately one month later. The Pearson product-moment correlation coefficient between these two sets of scores was .98.

Validity testing was completed for the STAL on thirty-eight ninth grade subjects. These subjects received the four subtests of the <u>Detroit Tests of Learning Aptitude</u> (DTLA) (Baker & Leland, 1967) assumed to be most directly related to the four subtests of the STAL. The Pearson product-moment correlation coefficient between the total STAL score and the total raw score across the four DTLA subtests was .86.

Adolescent Language Screening Test (ALST)

The Adolescent Language Screening Test (ALST) (Morgan & Guilford, 1984) was developed to screen for deficits associated with spoken language (Morgan & Guilford, 1984). The ALST is based on a contemporary view of language as presented by Bloom and Lahey (1978). Bloom and Lahey have identified the dimensions of content, form, and use as the three major components of language (Morgan & Guilford, 1984).

The ALST consists of the following seven subtests: (1) Pragmatics, (2) Receptive Vocabulary, (3) Concepts, (4) Expressive Vocabulary: a. Naming to Confrontation, b. Naming to Description, c. Use of Lexical Items, (5) Sentence Formulation, (6) Morphology, and (7) Phonology. The ALST is administered individually and requires approximately 10-15

minutes to complete. This test was standardized for adolescents, ages eleven through seventeen (Morgan & Guilford, 1984).

Presently, validity and reliability on the ALST have not been established.

CHAPTER 4

RESULTS OF THE STUDY

The focus of this study was to determine if there was a significant difference between overall performance and overall pass/fail rates on the Clinical Evaluation of Language Functions, Advanced Level Screening Test (CELF), the Screening Test of Adolescent Language (STAL), and the Adolescent Language Screening Test (ALST). Each test was administered to thirty seventh grade students and analyzed using a one-way analysis of variance and Chi Square.

Results

The results of individual performance on the three adolescent language screening tests are presented in Tables 1 through 3. As shown in Table 1, total raw scores on the CELF ranged from 24 to 49 with a mean of 39.83 and a standard deviation of 6.74. Also in Table 1 are raw scores on the Processing and Production subtests of the CELF.

Table 2 shows the overall performance on the STAL as well as performance on each individual subtest. Overall raw scores ranged from 4 to 23 with a mean of 17.03 and a standard deviation of 5.87. Results of the ALST are shown in Table 3. Raw scores ranged from 46 to 92 with a mean of 74.97 and a standard deviation of 14.27.

$\underline{\textbf{Individual}} \ \underline{\textbf{Raw}} \ \underline{\textbf{Scores}} \ \underline{\textbf{on}} \ \underline{\textbf{the}} \ \underline{\textbf{CELF}}$

	Subtests				
Subjects	<u>Total</u>	LPC	LPD		
1	35	26	9		
2	46	32	14		
3	46	33	13		
4	47	33	14		
5	41	29	12		
6	46	31	15		
7	48	33	15		
8	49	32	17		
9	39	29	10		
10	40	27	14		
11	44	32	12		
12	36	26	10		
13	33	21	12		

Table 1 (continued)

$\underline{\textbf{Individual}} \ \underline{\textbf{Raw}} \ \underline{\textbf{Scores}} \ \underline{\textbf{on}} \ \underline{\textbf{the}} \ \underline{\textbf{CELF}}$

Subtests

Subjects	<u>Total</u>	LPC	LPD	
14	31	10	41	
15	30	23	7	
16	34	28	6	
17	39	28	11	
18	34	25	9	
19	44	29	14	
20	24	16	8	
21	41	29	12	
22	38	24	14	
23	41	29	12	
24	42	27	15	
25	49	33	16	
26	46	30	16	

Table 1 (continued)

$\underline{\text{Individual}} \ \underline{\text{Raw}} \ \underline{\text{Scores}} \ \underline{\text{on}} \ \underline{\text{the}} \ \underline{\text{CELF}}$

Subtests

Subjects	<u>Total</u>	LPC	LPD	
27	26	17	9	
28	45	31	14	
29	29	20	9	
30	43	30	13	

Range of total scores 24-49

Mean of total scores 39.83

S.D. of total scores 6.74

CELF: Clinical Evaluation of Language Functions, Advanced

Level Screening Test

LPC: Language Processing

LPD: Language Production

		Subtests			
Subjects	<u>Total</u>	<u>v</u>	AM	<u>LP</u>	PE
1	9	2	1	5	1
2	22	11	3	5	3
3	23	12	3	5	3
4	23	12	3	5	3
5	17	8	2	5	2
6	19	10	3	4	2
7	22	11	3	5	3
8	19	8	3	5	3
9	16	7	2	4	3
10	22	11	3	5	3
11	20	9	3	5	3
12	22	11	3	5	3
13	13	6	1	4	2

Table 2 (continued)

$\underline{\textbf{Individual}} \ \underline{\textbf{Raw}} \ \underline{\textbf{Scores}} \ \underline{\textbf{on}} \ \underline{\textbf{the}} \ \underline{\textbf{STAL}}$

			Sub	tests	
Subjects	<u>Total</u>	<u>v</u>	AM	<u>LP</u>	PE
14	21	10	3	5	3
15	7	2	0	4	1
16	7	4	1	1	1
17	16	7	2	4	3
18	15	7	1	5	2
19	16	7	2	5	2
21	16	6	3	5	2
22	21	11	3	5	2
23	19	10	2	5	2
24	21	10	3	5	3
25	23	12	3	5	3
26	21	11	3	5	2
27	9	5	0	3	3

Table 2 (continued)

 $\underline{\text{Individual}} \ \underline{\text{Raw}} \ \underline{\text{Scores}} \ \underline{\text{on}} \ \underline{\text{the}} \ \underline{\text{STAL}}$

Su	1	+	_	_	+	_
$D \Pi$	1)	1.	e	S	L	S

Subjects	Tota1	<u>v</u>	AM	LP	PE
28	22	11	3	5	3
29	5	2	0	2	1
30	21	11	2	5	3

Range of total scores 4-23

Mean of total scores 17.03

S.D. of total scores 5.87

STAL: Screening Test of Adolescent Language

V: Vocabulary

AM: Auditory Memory

LP: Language Probe

PE: Proverb Explanation

Table 3

Individual Raw Scores on the ALST

			Subtests	
Subjects	<u>Total</u>	<u>U</u>	<u>C</u>	<u>F</u>
1	59	4	24	31
2	87	8	38	41
3	91	5	43	43
4	91	5	44	46
5	55	6	24	25
6	78	8	40	30
7	85	8	41	36
8	88	8	40	40
9	71	7	33	31
10	81	6	40	35
11	87	4	42	41
12	87	5	42	40

$\underline{\text{Individual}} \ \underline{\text{Raw}} \ \underline{\text{Scores}} \ \underline{\text{on}} \ \underline{\text{the}} \ \underline{\text{ALST}}$

	Subtests			
Subjects	<u>Total</u>	<u>U</u>	<u>C</u>	<u>F</u>
13	81	7	33	41
14	84	6	41	37
15	47	3	17	27
16	54	4	24	26
17	75	8	33	34
18	69	7	32	30
19	79	7	34	38
20	46	4	18	24
21	81	4	37	40
22	76	5	36	35
23	72	5	35	32
24	87	5	42	38
25	92	8	44	40

 $\underline{\text{Individual}} \ \underline{\text{Raw}} \ \underline{\text{Scores}} \ \underline{\text{on}} \ \underline{\text{the}} \ \underline{\text{ALST}}$

Subjects	<u>Total</u>	<u>U</u>	<u>C</u>	<u>F</u>	
26	82	6	39	37	
27	50	3	20	27	
28	88	7	42	39	

3

5

Subtests

24

33

28

33

Range of total scores 46-92

55

71

Mean of total scores 74.97

S.D. of total scores 14.27

ALST: Adolescent Language Screening Test

U: Use

29

30

C: Content

F: Form

Analysis

To test hypothesis 1, the differences in performance on three adolescent language screening tests was analyzed using a one-way analysis of variance for repeated measures (See Table 4). Results show that there is not a significant difference between overall performance on the three tests (\underline{F} = .44, df = 2/87, p = <.05).

Hypothesis 2 was tested by applying a Chi Square analysis to the pass/fail rates on the three adolescent language screening tests (See Table 5). Passing and failing scores were determined by the authors of each individual test. The result of this analysis showed no significant difference between pass/fail rates on the three adolescent language screening tests. Table 6 shows the percentage of passing scores on the three tests.

Table 4

One- Way Analysis of Variance for the CELF, the STAL, and the ALST

TEST	SIZE	MEAN	SD	SUM OF SQ DEV
CELF	30	.23	1.25	45.20
STAL	30	.54	1.64	77.94
ALST	30	.44	1.04	31.45
Total	90	.40	1.32	
			SUMMARY	
SOURCE	SUM	SQS.	DF	EST. VAR.
AMONG	1	.55	2	.77
WITHIN	154	.60	87	1.78
Total	156	.15		
F	= .44			$ETA^2 = .01$

Table 5

<u>Chi-Square Analysis of Pass/Fail Rates on the CELF,</u>

<u>the STAL, and the ALST</u>

TEST	CELF	STAL	ALST	
OBSERVED	25	25	23	
EXPECTED	25	25	25	
	CHI SQUARE = $0 + 0 + .16$ = .16			
	df = 2	.10		

Table 6

Number and Percentage of Passing Scores on the CELF,
the STAL, and the ALST

TEST	CELF	STAL	ALST	
PASS	25	25	23	
FAIL	5	5	7	
Tota1	30	30	30	
% PASSING	83%	83%	77%	

CHAPTER 5

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

Summary

The purpose of this study was to examine the differences in performance and pass/fail rates on the Clinical Evaluation of Language Functions, Advanced Level Screening Test (CELF), the Screening Test of Adolescent Language (STAL), and the Adolescent Language Screening Test (ALST).

The subjects in this study were 30 seventh grade students ranging in age from 11 years 0 months to 13 years 1 month. They were all students at Parkway Elementary School, Boone, North Carolina.

The CELF, the STAL, and the ALST were individually administered to each student according to standardized procedures. All three tests were administered in a single sitting which took approximately 36 minutes.

The data were analyzed by means of a one-way analysis of variance to compare the differences in overall performance on the three adolescent language screening tests; and by means of a Chi Square test to compare the relationship of pass/fail rates. Results showed no significant difference in overall performance and pass/fail rates on the three tests.

Analysis of the performance on the CELF, the STAL, and the ALST revealed a marked degree of correspondance between these three tests. This suggests that individuals who received high scores on one language screening test also received high scores on the other two language screening tests. Conversely, individuals who achieved low scores achieved low scores on the other tests. The analysis also suggests that individuals who achieved a passing score on one test also achieved a passing score on the other two tests and individuals who failed one test failed the other two tests.

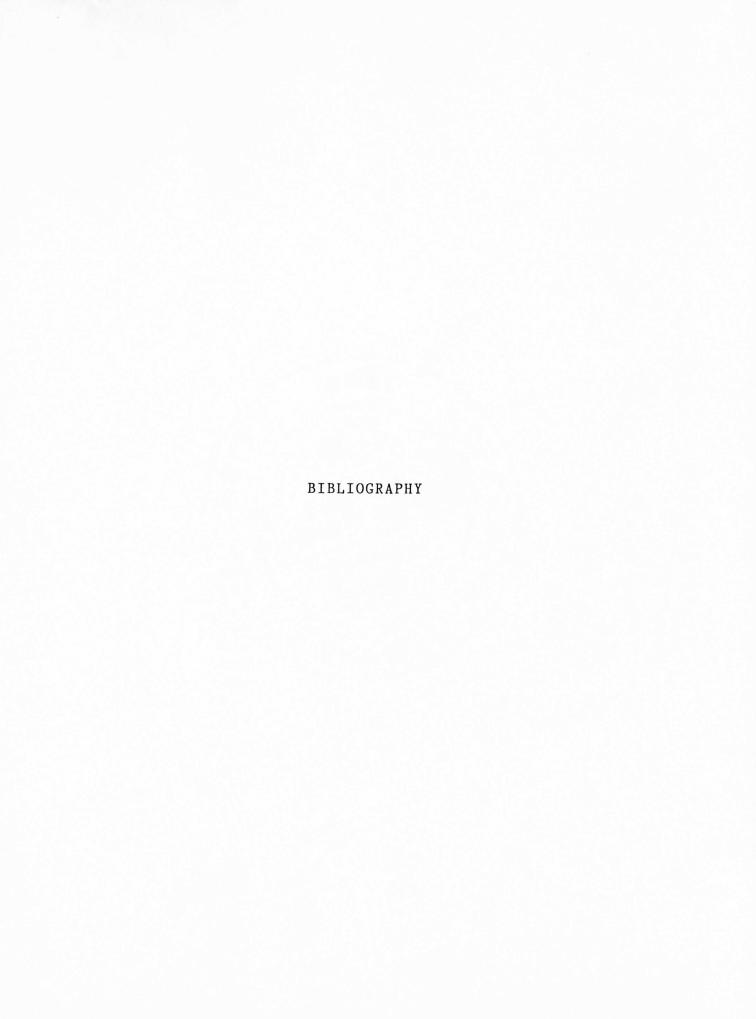
Implications

This project was an attempt to determine if there was a difference in performance and pass/fail rates on the CELF, the STAL, and the ALST. These findings suggest that any one of the three tests provides similar information about the language performance of seventh grade students. A speech-language pathologist may use these tests interchangeably since results are similar across the tests. The author preferred using the STAL to screen for adolescent language disorders. It was easy to administer and score, took only 7 minutes to give, and the subjects appeared to enjoy it more than the CELF or the ALST.

Recommendations

As a result of this study the following recommendations for further research of the CELF, the STAL, and the ALST are made:

- 1. This study should be replicated with a larger sample to corroborate the present findings.
- 2. Complete diagnostic evaluations should be done on each child passing or failing the language screening to determine the predictive validity of the three screening tests.



Bibliography

- Aram, D.M., & Nation, J.E. (1977). <u>Diagnosis of speech and language disorders</u>. St. Louis: C.V. Mosby Company.
- Baker, H.J., & Leland, B. (1967). <u>Detroit test of learning</u>
 aptitude. Indianapolis: Bobbs-Merrill Co., Inc.
- Bloom, L. & Lahey, M. (1978). <u>Language development and</u>

 <u>language disorders</u>. New York: John Wiley and Sons, Inc.
- Bryen, D. & Gerber, A. (1981). <u>Language and learning</u>
 disabilities. Baltimore: University Park Press.
- Bryen, T.H. (1977). Comprensive of nonverbal communication.

 Journal of Learning Disabilities, 10, 36-41.
- Cook, L.D. (1979). The adolescent with a learning disability: A developmental perspective. Adolescence, 14, 697-707.
- Cross, L. (1977). <u>Handicapped children: A guide to casefinding, screening, diagnosis, assessment and evaluation</u>. New York: Walker and Company.
- Emerick, L.L. & Hatten, J.T. (1979). <u>Diagnosis and evaluation in speech pathology</u>. Englewood Cliff, NJ: Prentice-Hall.
- Gardner, H., Winner, E., Bechhofer, R., & Wolf, D. (1978).

 The development of figuraative language. Children's

 Language: Volume I. New York: Gardner Press.
- Gerber, A. & Bryen, D. (1981). <u>Language and learning</u>
 disabilities. Baltimore: University Park Press.

- Hammill, D.D., Brown, V.L., Larsen, S.C., & Wiederholt, J.L. (1980). Test of adolescent language: A multi-dimensional approach to assessment. Texas: Pro-Ed.
- Hurlock, E.B. (1973). Adolescent development. New York:

 McGraw-Hill.
- Kirk, S.A, McCarthy, J.J., & Winifred, D.K. (1968).

 Illinois test of psycholinguistic abilities. Urbana:
 University of Illinois Press.
- Lee, L.L. (1971). <u>Northwestern syntax screening test</u>.

 Evanston, IL: Northwestern University Press.
- Lerner, J. (1981). <u>Learning disabilities: Theories,</u>

 <u>diagnosis, and teaching</u> (3rd ed.). Boston: Houghton

 Mifflin.
- Lipsett, L.P. (1958). A self-concept scale for children and its relationship to the Children's Form of the Manifest Anxiety Scale. Child Development, 29, 463-472.
- Morgan, D.L., & Guilford, A.M., (1984). Adolescent Language

 Screening Test. Tulsa: Modern Education Corporation.
- Nelson, N.W. (1981). Tests and materials in speech and language screening. Seminars in Speech, Language, and Hearing, 2, 11-12.
- Prather, E.M. (1984). Developmental language disorders:

 adolescents. In A.L. Holland (Ed.), <u>Language disorders in children</u> (pp. 159-172). San Diego: College-Hill Press.
- Prather, E.M., Breecher, S.V., Stafford, M.L., & Wallace,
 E.M. (1980). <u>Screening Test of Adolescent Language</u>.

 Seattle: University of Washington Press.

- Swaim, J. (1982). <u>This We Believe, National Middle School</u>
 Association. Macon, GA: Omnipress.
- Tibbits, D.F. (1982). <u>Language disorders in adolescents</u>. Lincoln: Cliffs Notes.
- U.S. Office of Education (1977). Education of handicapped children: Implementation of Part B of the Education of the Handicapped Act. Federal Register, Part II.

 Washington, D.C.: U.S. Department of Health, Education, and Welfare.
- West, S.K. (1985). A comparison of performance on two adolescent language tests. Unpublished master's thesis, Appalachian State University, Boone, N.C.
- Wiig, E.H. & Semel, E.M., (1980a). <u>Language assessment and</u> intervention. Columbus: Charles E. Merrill.
- Wiig, E.H. & Semel, E.M., (1980b). <u>Clinical Evaluation of Language Functions</u>. Columbus: Charles E. Merrill.

APPENDIX A

 $\underline{\text{Permission}} \ \underline{\text{To}} \ \underline{\text{Test}} \ \underline{\text{Letter}}$

Appendix A Permission To Test Letter

August 26, 1985

Dear,
There are a number of different tests used to measure
adolescent language. We are making a comparison of these
tests. The results of this comparison will benefit speech
therapists by helping them to choose the best test to use
when working with seventh graders in Watauga County.
You can help by giving your son or daughter permission
to be tested. All test results remain confidential and
your child's name will not be used. This testing will in
no way affect your child's grade or school performance.
We greatly appreciate your help and cooperation with
our study.
Thanks,
Carolyn Cameron
Please detach and return
HE 1987년 1987년 1일
has my permission to participate in
the Adolescent Language project at Parkway School.
(signature of parent) (date)

APPENDIX B

Order of Testing

Order of Testing Appendix B

Subject 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	Test 1 S S C A C S C A C S C A C S C A C S A C S A C S A C S A C S A C A S A	Test 2 A C A C S C A A S C A A S C A A C A A C A C	Test 3 C A S S A S C A S C A C S C A C S C C C C
30	A	S	С

C: Clinical Evaluation of Language Function, Advanced Level Screening Test
S: Screening Test of Adolescent Language Adolescent Language Test

VITA

Carolyn Cameron was born in Sanford, North Carolina on April 7, 1962. She attended elementary school in Broadway, North Carolina and graduated from Lee County Senior High School, Sanford, North Carolina in June, 1980. The following August she entered Appalachian State University, and in May 1984, she received a Bachelor of Science degree in Speech Pathology and Audiology. In the fall of 1984, she began her work toward a Master's Degree at Appalachian State University. This was awarded in Speech Pathology in May 1986.

Ms. Cameron's permanent address is 1331 Avent's Ferry Road, Sanford, North Carolina.

Her parents are Cecil and Faye Cameron also of Sanford, North Carolina.