Tenn LB 2322 .A9x F-53

A STUDY COMPARING WISC-R AND WISC-III IQ SCORES FOR A GROUP OF LEARNING DISABLED STUDENTS

BELINDA FAITH BATIE

A STUDY COMPARING WISC-R AND WISC-III IQ SCORES FOR A GROUP OF LEARNING DISABLED STUDENTS

An Abstract
Presented to the

Graduate and Research Council of
Austin Peay State University

In Partial Fulfillment

of the Requirements for the Degree

Education Specialist

by Belinda Faith Batie June 1992

ABSTRACT

This study was conducted to determine the stability of IQ scores for a sample of 51 learning disabled students between WISC-R and WISC-III administrations given approximately three years apart. The sample was divided into two groups, one with IQ scores of 85 or higher at the previous evaluation and one with IQ scores below 85 at the previous evaluation.

The study revealed that the sample as a whole showed significantly greater declines in all three scores, Verbal, Performance, and Full-Scale IQ scores, than predicted by the WISC-III manual for exceptional populations. The group with previous IQ scores of 85 or higher showed significantly greater declines than predicted as well. However, the group with IQ scores below 85 at the previous evaluation only demonstrated significantly greater declines in the Performance IQ score.

A STUDY COMPARING WISC-R AND WISC-III IQ SCORES FOR A GROUP OF LEARNING DISABLED STUDENTS

A Field Study

Presented to the

Graduate and Research Council of

Austin Peay State University

In Partial Fulfillment

of the Requirements for the Degree

Education Specialist

by Belinda Faith Batie June 1992

$_{ extsf{T0}}$ the Graduate and Research Council:

I am submitting herewith a field study written by Belinda Faith Batie entitled "A Study Comparing WISC-R and WISC-III IQ Scores for a Group of Learning Disabled Students." I have examined the final copy of this paper for form and content, and I recommend that it be accepted in partial fulfillment of the requirements for the degree Education Specialist, with a major in Education.

Major Professor

Second Committee Member

Third Committee Member

Accepted for the Graduate and Research Council:

Dean of the Graduate School

ACKNOWLEDGEMENTS

The author wishes to express sincere appreciation to Dr. Susan Kupisch, Professor of Psychology, Austin Peay State University, for her encouragement and assistance during the pursuit of this degree.

Appreciation is extended to Dr. Corinne Hay Mabry,
Assistant Professor of Psychology, and Dr. Donald Lambert,
Professor of Education, for their support of this project.

TABLE OF CONTENTS

CHAPTER

C11212																		
1.	INTRODUCTION	1																1
2.	REVIEW OF TH	E LITE	RATU	RE							٠.						ì	4
	WISC-III	Revisi	on .															4
	WISC-R/WI																	
	Stability																	
	Children																	7
3.	METHODOLOGY																	
4.	RESULTS																	
5.	DISCUSSION .																	
	Implicati																	
RIBLIO	GRAPHY																	
APPEND	IX A			•	•	•	•	•	•	•	•	•	٠	٠	٠	٠	*	28
Let	ter Requestin	g Perm	issi	on							•							29
Let	ter Granting	Permis	sion															30

LIST OF TABLES

LE		
1.	VIQ Means and Mean Difference by Groups	16
2.	PIQ Means and Mean Difference by Groups	16
3.	FSIQ Means and Mean Difference by Groups	17
4.	Percentage of Cases Showing a Decline in VIQ, PIQ, and FS	IQ
	by Groups	18
5.	Percentage of Students Maintaining LD Identification at	
	Second Evaluation by Groups	20

CHAPTER 1

Introduction

The Wechsler Intelligence Scale for Children-Revised (WISC-R), published in 1974, is the most widely accepted intelligence instrument currently utilized by school psychologists. Its recent revision, the Wechsler Intelligence Scale-III (WISC-III), is expected to continue that tradition of usefulness. Specifically, the WISC-III will likely replace the WISC-R as the instrument of choice in triannual re-evaluations of exceptional populations required by PL 94-142, the Education for All Handicapped Children Act, passed in 1975. Since measures of cognitive ability play a key role in the diagnosis and classification of exceptional children, an issue of concern to practitioners is the stability of the instruments being used. The issue of stability of cognitive ability scores is exacerbated by the emergence of a revised edition. With the recent publication of the WISC-III there has not been the opportunity to compare the WISC-R and the WISC-III over a span of time. Although different names are given to measures of cognitive ability in other scales, the intelligence quotient (IQ) is used in the Wechsler Scales, and thus will be employed in this study.

According to Anastasi (1988), an extensive body of data has demonstrated that intelligence test performance is quite stable over the elementary, high school, and college

periods. However, she noted that although IQ score correlation studies provide actuarial data applicable to group predictions, studies of individuals reveal large upward or downward shifts in IQ scores. Factors that might affect a child's subsequent intellectual development include the following: drastic changes in family structure or home conditions, adoption into a foster home, severe or prolonged illness, and introduction of therapeutic or remedial programs. In general, children in culturally disadvantaged environments tend to lose IQ points with age while their counterparts in more stimulating environments tend to gain IO points (Anastasi, 1988).

Although the stability of IQ in the general population has been well documented over time, relatively few studies have dealt with the stability of IQ of learning disabled (LD) children (Furlong & Yanagida, 1984; Stavrou, 1990). Many previous investigations of the diagnostic usefulness of the WISC and WISC-R have involved a search for distinct patterns of subtests which could be associated with certain intellectual or educational handicaps (Schmidt, Kuryliw, Saklofske, & Yackulic, 1989). For example, LD students have been found to perform significantly better on Performance subtests than on Verbal subtests (Anderson, Kaufman, & Kaufman, 1976). Additionally, discrepancies between the two major sections of the Wechsler scales--Verbal and

performance--have occurred more frequently in LD children (Saklofske, Schmidt, & Yackulic, 1984).

Since LD students comprise the largest group being served under PL 94-142, the importance of examining stability of IQ in this population is highlighted. The federal government count indicated that 4.63% of the population age 3 through 21 received special education services under the category of learning disabled in 1983-84 (U.S. Office of Education, 1984). The purpose of this study was to investigate the stability of IQ scores of learning disabled students by comparing WISC-R and WISC-III scores given three years apart. This comparison is salient to school psychologists in light of the importance of IQ scores in special education classification.

CHAPTER TWO

Review of the Literature

WISC-III Revision

The principal goal of development of the WISC-III was to maintain the basic structure and content of the WISC-R. Data accumulated from many experts in psychological measurement during the revision process indicated a clear message, "Don't change it." The consensus to change as little as possible stemmed from an overriding objective to provide continuity and allow for the study of historical trends, despite the emergence of a number of new theories of intelligence in the last two decades (Roid, 1990). One compelling reason for maintaining the theoretical basis of previous Wechsler scales was the proven importance of the g theory, the concept of a general factor, which has survived since the early work of Spearman and Vernon (Sattler, 1988).

A second goal was to update norms in the third edition. Over the past several decades, average performance on IQ tests has been increasing, with the Performance IQ showing more gain than the Verbal IQ. A stratified random sampling plan was employed based on information gained from the 1988 U.S. Bureau of Census to control for the following variables: age, gender, race/ethnicity, geographic region, and parent education. Although the WISC-R included non-whites in the standardization sample, that group did not closely resemble the 1970 Census in its proportions of

specific minority groups (Sattler, 1988). The WISC-III standardization sample of 2200 cases included 200 children in each of 11 age groups, 100 males and 100 females (Wechsler, 1991).

A third goal of development was to improve subtest content, administration, and scoring rules. One focal point of subtest improvement was to minimize the presence of gender, ethnic, and regional bias. Another focus was to refine and update artwork. For example, for the subtests Object Assembly, Picture Completion, and Picture Arrangement, completely new, colorful artwork was added. Additionally, in order to alleviate the problem of inadequate basals and ceilings on certain subtests, new items were created.

The final goal in the development of the WISC-III was the enhancement of the factor structure. In addition to the two prominent factors, Verbal Comprehension and Perceptual Organization, the third factor, Freedom from Distractibility, was researched widely. This factor is a combination of attention, short-term memory, and, to some extent, numerical ability.

Minor changes in administration procedures and scoring rules were included, as well. The order of subtests was changed so that the battery begins with Picture Arrangement, thought to be a more nonthreatening task and less associated with traditional test demands. Technically unsuitable or

dated items were revised or deleted. Additionally, the bonus point structure of the Performance subtests was revised. Finally, a new optional Performance subtest, Symbol Search, was added to enhance the diagnostic utility of the WISC-III (Wechsler, 1991).

WISC-R/WISC-III Comparisons

Although the WISC-III manual does not contain any longitudinal studies comparing WISC-R to subsequent WISC-III IQs, two studies were reported in which the tests were administered in counterbalanced order. The first study included a random sampling of 206 children ages six through sixteen with an interval of 12 to 70 days between test administrations. A comparison revealed that the WISC-III Full Scale IQ (FSIQ) score was approximately 5 points lower than the WISC-R FSIQ score. The Verbal IQ (VIQ) score and Performance IQ (PIQ) score on the WISC-III were approximately 2 and 7 points lower respectively than their WISC-R counterparts. The difference is expected as a result of the number of years between standardization of the two tests. A child's score on the WISC-R is inflated since it is being compared to an outdated standardization sample (Wechsler, 1991).

A second study reported in the WISC-III manual which included a clinical sample was conducted on 104 children, of which 57% were labeled as learning and reading disabled, 35%

were ADHD, and 8% were diagnosed as having depression or other emotional disorders. The children ranged in age from seven to fourteen. The mean WISC-III FSIQ was 5.9 points lower than the WISC-R FSIQ. The mean WISC-III VIQ and PIQ were 5.4 and 5.1 points lower respectively than the corresponding WISC-R scores (Wechsler, 1991). The differences found in the previously cited studies are believed to be largely attributable to the more recent norming of the WISC-III.

Stability of IQ Scores in Learning Disabled Children

A review of the federal definition of learning disabilities, as well as the specific requirements of the state and district being examined are pertinent. Included in the federal definition are the following major concepts as cited by Lerner (1988):

- The individual has a disorder in one or more of the basic psychological processes.
- The individual has difficulty in learning, specifically, in speaking, listening, writing, reading and/or mathematics.
- 3. The problem is not primarily due to other causes, such as visual or hearing impairments, motor handicaps, mental retardation, emotional disturbance, or economic, environmental, or cultural disadvantage.

4. A severe discrepancy exists between the student's apparent potential for learning and low level of achievement.

Additionally, the specific requirements of Tennessee include more than a one standard deviation discrepancy between an appropriate ability measure, such as the Wechsler Full Scale IQ score and an appropriate achievement measure standard score. Although an underlying assumption is that the individual is of average to above average intelligence, this is not embedded in either the federal law or the requirements of the state and district being studied.

In one study, Schmidt, et al. (1989) measured the stability of WISC-R scores of 36 LD children tested on two occasions with an average of 2.5 years between evaluations. All subjects attained Full Scale IQs greater than 85 on the initial WISC-R and all received varying degrees of special education assistance between the two evaluations. The analysis of results revealed a decrease in Verbal IQ scores and Full Scale IQ scores. The decrease in Full Scale IQ scores was the result of the lowering in Verbal IQ scores, since the Performance IQ scores remained constant between the two test administrations. Two explanations were purported by the authors to account for the decrease in Verbal IQ scores. One possible explanation was that the WISC-R verbal test items for older children required a

greater degree of abstraction than verbal items given to younger children (Schmidt et al., 1989).

Another explanation cited by the authors was the deleterious effect of delayed initial reading skills on subsequent verbal comprehension. Snider and Tarver (1987) described how deficits in reading-decoding skills can lead to the failure to acquire the vocabulary and base of information normally gained through reading experiences. According to the authors, normal children generally move from a "learning to read" mode to a "reading to learn" mode by the end of third grade. It was hypothesized that the learning disabled children at the time of the second evaluation were still "learning to read" while their nondisabled peers were acquiring the knowledge and vocabulary necessary for higher level verbal skills. Consequently, the gap widened between the normal and disabled children with respect to their verbal comprehension skills (Schmidt, et al., 1989).

A third possible explanation for the widening gap in verbal ability between LD children and their nondisabled peers, which would be consistent with the two previously cited explanations, is the language problems basic to many learning disabilities. There is substantial evidence that LD students do less well than their normal counterparts in extensive language interactions and maintaining conversations (Pearl, Donahue, & Bryan, 1986).

Additionally, numerous studies suggest that LD adolescents and adults have poorer language and communication skills than their nondisabled peers (Johnson & Blalock, 1987). Therefore, studies seem to suggest that language difficulties that often begin with delayed acquisition of language continue into adulthood.

Stavrou (1990) conducted a longitudinal study of 100 learning-disabled and 60 mildly retarded children across a six year period including three WISC-R evaluations. the present study is concerned with the stability of IQ scores of learning disabled children, only the results of that group will be discussed. The stability of WISC-R scores was evaluated according to three criteria: the consistency of group means over time, the frequency of significant changes in individual scores, and correlations between administrations as an index of stability of subject's relative position in the group. Group means and correlation coefficients demonstrated the Full Scale IQ score to be fairly consistent across the six year period. Full Scale, Verbal, and Performance IQ scores fell approximately five, six, and less than two points respectively for the LD group. Greater variability was found when examining the frequency of changes in individual subjects' scores. Forty-two percent of the LD subjects experienced a drop of ten or more points in Verbal IQ scores between administrations one and three.

In a related study, Slate, Frost, and Cross (1990) examined the relationship between WISC-R and subsequent WAIS-R IQ scores in 38 college students who applied for entrance into a learning disabled program. The mean time between test administrations was approximately five years. Results indicated that the WISC-R and WAIS-R scores were significantly correlated; however, the LD sample tended to score lower on the WAIS-R. The mean Full Scale, Verbal, and Performance IQ scores on the initial WISC-R were 103.0, 101.9, and 104.9 respectively; the WAIS-R mean counterparts were 101.1, 99.9, and 103.7. Although the difference was not significant, it was thought to be largely due to the more recent norming of the WAIS-R. When considering the factors of high mean IQs and enrollment in college programs, the results of this sample may not generalize to the LD public school population.

In the present study, the decline in Verbal IQ scores and Full Scale IQ scores of LD children is expected to be significantly larger than those reported in the WISC-III manual. This sample of LD children is predicted to show sharper declines in VIQ scores and FSIQ scores. This decline is expected to be exacerbated by the anticipated decrease due to the more recent norming of the WISC-III.

Two of the cited studies did not include LD children with IQs below 85. The Schmidt et al. (1989) sample included only LD students with an IQ of 85 or higher and the

Slate, Frost, and Cross sample had a high mean IQ. The present study will divide the sample into two groups, one with IQs of 85 and above and one with IQs below 85 on their previous WISC-R evaluation, to examine whether the two groups differ with respect to an anticipated lowering of IQ scores at triannual evaluations. In order to address these issues, the following hypotheses will be investigated.

- 1. There will be a significantly larger decline in Verbal IQ and Full Scale IQ scores between WISC-R and WISC-III administrations than anticipated by the WISC-III manual for exceptional populations.
- 2. There will be a significantly greater difference between the group with previous IQs of 85 or above and the group with previous IQs below 85 with respect to their decrease in scores between WISC-R and WISC-III administrations.

CHAPTER 3

Methodology

Subjects

The sample consisted of 51 learning disabled students currently enrolled in the Clarksville-Montgomery County Schools, including 13 females and 38 males. The sample was divided into two groups, 36 having FSIQ scores of 85 or higher at the previous evaluation and 15 having FSIQ scores below 85 at the previous evaluation. The subjects ranged in age from 6 years 5 months to 12 years 10 months at the previous evaluation; ages ranged from 9 years 8 months to 16 years at the second evaluation. The time between the two evaluations ranged from 2.5 and 3.5 years. All subjects were identified as learning disabled at their previous evaluation.

Instruments

The Wechsler Intelligence Scale for Children-Revised (WISC-R) published in 1974 was the instrument used to assess cognitive ability in the first administration. Its revision, The Wechsler Intelligence Scale for Children-III (WISC-III), published in 1991, was employed to assess intellectual ability in the second administration.

Procedure

Data were gathered by this examiner from the Psychological Services Department of the Clarksville-Montgomery County Schools. The data gathered from students' psychological files included age and diagnoses at both evaluations, Verbal, Performance, and Full Scale IQs on the previous WISC-R and current WISC-III administrations, and time between test administrations. Both evaluations were conducted by a master's level school psychologist or psychological examiner.

Permission to gather these data was requested of and granted by the Clarksville-Montgomery County School Board (See Appendix A). After the data were gathered, post-hoc statistical analyses using the Student's t-test was performed to evaluate the research hypotheses.

CHAPTER 4

Results

In order to evaluate the hypothesis of significantly greater decline in verbal and full scale IQ scores than predicted by the WISC-III manual for exceptional populations, the Student's t-test was used. Mean and standard error of the mean were computed for VIQ, PIQ, and FSIQ scores for both the WISC-R and WISC-III administrations. The difference found between administrations was computed for VIQ, PIQ and FSIQ scores; mean and standard error of the mean were determined for the difference, as well. As summarized in Tables 1, 2, and 3, the mean declines between WISC-R and WISC-III evaluations for VIQ, PIQ, and FSIQ scores were 7.57, 8.76, and 8.53 respectively. These declines were compared to the WISC-III manual's predicted declines of 5.4 for the VIQ score, 5.1 for the PIQ score, and 5.9 for the FSIQ score. The declines found for this sample were significantly greater for all three measures: VIQ - p<.10, PIQ - p<.005, and FSIQ p<.025.

The percentage of students showing a decline in VIQ, PIQ, and FSIQ scores is summarized in Table 4. A decline in the FSIQ score was demonstrated by 84.3% of the sample.

Declines in VIQ and PIQ scores were evidenced by 76.5 and 86.3% of the subjects respectively.

Table 1:
VIQ Means and Mean Difference by Groups

Group	N	VIQ(1)	VIQ(2)	Mean VIQ Difference
Group 1	36	94.42	86.25	8.167
Group 2	15	78.4	72.28	6.13
Groups 1 and 2	51	89.71	82.14	7.57

Group 1 Previous IQ scores of 85 or higher

Group 2 Previous IQ scores below 85

Table 2:

PIQ Means and Mean Difference by Groups

Group	N	PIQ(1)	PIQ(2)	Mean PIQ Difference
Group 1	36	104.72	95.94	8.78
Group 2	15	81.67	72.93	8.74
Groups 1 and 2	51	97.94	89.18	8.77

Group 1 Previous IQ scores of 85 or higher

Group 2 Previous IQ scores below 85

Table 3:

FSIQ Means and Mean Difference by Groups

Group	N	FSIQ(1)	FSIQ(2)	Mean FSIQ Difference
Group 1	36	99.03	90.22	8.81
Group 2	15	78.2	70.33	7.87
Groups 1 and 2	51	92.9	84.37	8.53

Group 1 Previous IQ scores of 85 or higher

Group 2 Previous IQ scores below 85

Table 4:

Percentage of Cases Showing a Decline in VIQ, PIQ, and FSIQ
by Groups

Group	N	% Showing Decline
VIQ - Group 1	36	75
VIQ - Group 2	15	80
VIQ - Groups 1 and 2	51	76.5
PIQ - Group 1	36	83.3
PIQ - Group 2	15	86.7
PIQ - Groups 1 and 2	51	86.3
FSIQ - Group 1	36	86.1
FSIQ - Group 2	15	80
FSIQ - Groups 1 and 2	51	84.3

Group 1 Previous IQ scores of 85 or higher

Group 2 Previous IQ scores below 85

To evaluate the second hypothesis concerning a difference in decline by the group with previous IQ scores of 85 or higher and the group with previous IQ scores below 85, the Student's t-test was used. Means and standard errors of the mean were computed separately for each group for VIQ, PIQ, and FSIQ scores for both the WISC-R and WISC-III administrations. The difference between the WISC-R and WISC-III administrations was determined for VIQ, PIQ, and FSIQ scores, mean and standard error of the mean for all three scores was computed, as well. As noted in Tables 1, 2, and 3, Group 1 showed mean declines of 8.167 in the VIQ score, 8.78 in the PIQ score, and 8.81 for the FSIQ score. Group 2 demonstrated declines of 6.13, 8.74, and 7.87 for VIQ, PIQ, and FSIQ scores respectively. Mean declines for VIQ, PIQ, and FSIQ scores were compared to the expected decline for exceptional populations in the WISC-III manual to determine significance. The declines shown for Group 1 were significantly greater than predicted by the manual on all three scores: VIQ - p<.10, PIQ - p<.025, and FSIQ p<.025. Group 2 only demonstrated significantly greater declines than expected in the WISC-III manual on PIQ p<.025.

As summarized in Table 5, 86% of the students in Group 1 were re-identified as learning disabled at their second evaluation, compared to 40% of Group 2 who maintained their LD status.

Table 5:

percentage of Students Maintaining LD Identification at
Second Evaluation by Groups

Group	N	% Classified LD (2nd Evaluation)
Group 1	36	86
Group 2	15	40

Group 1 Previous IQ scores of 85 or higher

Group 2 Previous IQ scores below 85

CHAPTER 5

Discussion

The significantly greater decline in Verbal and Full Scale IQ scores found in this sample of learning disabled students was consistent with one previously cited study. This finding lends further evidence to the decline in the verbal functioning of LD students in comparison to nondisabled peers. However, the significantly greater decline in the Performance IQ score was not expected. A number of possible explanations for this finding could be purported. One conceivable explanation is that, perhaps, the decline in cognitive functioning in LD children is more global in nature than previously thought. Another explanation which could account for the decline in the PIQ score is that the bonus point restructuring of the WISC-III resulted in a lower score for this sample. A third possible explanation is that with increasing age, the scores in the Performance section are more dependent on speed of response. Many LD children have perceptual deficits, such as poor visual motor integration skills, which may hinder performance on tasks requiring psychomotor speed. Consequently, as the test becomes more dependent on speed, the child's score decreases. Finally, many children in special education classes are discouraged from responding impulsively; perhaps a more reflective, careful responding style could result in a decreased score.

The second question examined by this study concerned the expected difference in decline between the group with previous IQ scores of 85 or higher and the group with previous IQ scores of below 85. Since no previously cited studies had dealt with LD students with IQs below 85, those were examined separately. The significantly greater decline in all three scores found in the average IQ group was consistent with findings for the sample as a whole. However, the low IQ group only experienced significantly greater declines in Performance IQ. Only 40% of this group maintained their LD classification at their WISC-III evaluation compared to 86% of the average IQ group. Additionally, the mean IQ of this group at the second evaluation was 70.33. It is plausible that the majority of subjects in this group were not truly learning disabled at the previous evaluation, but rather met this certification due to inflated IQ scores on the WISC-R. The significantly greater decline in the Performance IQ evidenced by this low IQ group remains a question to be pondered. Whether there is a difference in the performance sections of the two tests or whether there was a real decline in perceptual/ manipulative functioning in the sample cannot be determined by the present study.

It was noted while gathering the data for this study that the sample was comprised of 41% recipients of free or reduced lunch benefits, thought to be a measure of low SES

whole receiving those benefits, there is a substantially larger percentage of low SES students in the sample. Consequently, low SES status cannot be ruled out as a factor affecting the significantly greater decline in cognitive ability in this LD sample than predicted by the WISC-III manual for exceptional populations.

Implications for the Future

It is important for school psychologists to be aware of the declines in IQ scores which will likely be evidenced by LD students when re-evaluated using the WISC-III. Of particular concern to practitioners will be those students whose inflated IO scores on the WISC-R resulted in erroneous LD certification. In many cases, students and parents will be forced to deal with the more emotionally difficult identifications of Mentally Retarded or Functionally Retarded when re-evaluated. A second possible scenario which may affect children at re-evaluations is not qualifying for any special education services. School psychologists will need to be prepared to assist parents, students, and teachers in understanding and accepting new identifications or discontinuance of special education services.

Secondly, as a result of the decline in verbal abilities further indicated in the present study and the

perceptual and more global deficits implicated by this research, it is suggested that future studies explore the effect that different placements in special education have on cognitive ability at triannual evaluations. With the emphasis today on mainstreaming special education students to the fullest extent, the effect of different placements on learning as reflected in IQ measures over time is particularly salient.

Finally, due to the deficits demonstrated in cognitive ability in LD students over time, parent training in early intervention techniques to enhance children's language development and overall cognitive ability seems of paramount importance.

BIBLIOGRAPHY

- Anastasi, A. (1988). <u>Psychological Testing</u> (6th ed.). New York: Macmillan Publishing.
- Anderson, M., Kaufman, A. S. & Kaufman, N. (1976). Use of WISC-R with a learning disabled population: some diagnostic implications. Psychology in the Schools, 13, 381-386 in Schmidt, et al. (1989). Stability of WISC-R scores for a sample of learning disabled children. Psychological Reports, 64, 195-201.
- Furlong, M. J. & Yanagida, E. H. (1984). Stability of the WISC-R V-P discrepancy at learning disabled children's triannual evaluation. Diagnostique, 9, 154-160.
- Johnson, D. & Blalock, J. (1987). Young Adults with

 Learning Disabilities. New York: Grune & Stratton in

 J. W. Lerner (1988) Learning Disabilities (5th ed.).

 Boston: Houghton Mifflin.
- Lerner, J. W. (1988). <u>Learning Disabilities</u> (5th ed.).

 Boston: Houghton Mifflin.
- Pearl, R., Donahue, M., & Bryan, T. (1986). Social relationships of learning disabled children in J.

 Torgensen & B. Wong (editors) Psychological and Educational Perspectives on Learning Disabilities in J.

 W. Lerner (1988) Learning Disabilities (5th ed.).

 Boston: Hougton Mifflin.

- Roid, G. H. (1990). Historical Continuity in Intelligence

 Assessment: Goals of the WISC-III standardization.

 Manuscript submitted for publication. Boston, MA.

 (ERIC Documentation Reproduction Service No. ED

 329587).
- Saklofske, D. H., Schmidt, H. P. & Yackulic, R. A. (1984).

 Variations in WISC-R patterns of learning disabled children. Perceptual and Motor Skills, 59, 415-421 in Schmidt, et al. (1989). Stability of WISC-R scores for a sample of learning disabled children. Psychological Reports, 64, 195-201.
- Sattler, J. M. (1988). <u>Assessment of Children</u> (3rd ed.) San Diego: Jerome M. Sattler.
- Yackulic, R. A. (1989). Stability of WISC-R scores for a sample of learning disabled children. Psychological Reports, 64, 195-201.
- Slate, J. R., Frost, J., & Cross, B. (1990). Comparability of WISC-R and WAIS-R scores for a sample of college students with learning disabilities. Learning Disability Quarterly, 13, 205-208.
- Snider, V. E., & Tarver, S. G. (1987). The effect of early
 reading failure on acquisition of knowledge among
 students with learning disabilities. Journal of
 Learning Disabilities, 20, 351-356.

- stavrou, E. (1990). The long-term stability of WISC-R scores in mildly retarded and learning-disabled children. Psychology in the Schools, 27, 101-110.
- United States Department of Education (1984). Executive summary, 6th annual report to congress on the implementation of PL 94-142: the education for all handicapped children act. Washington, DC: U.S. Department of Education.
- Wechsler, D. (1991). Wechsler Intelligence Scale for Children-III Manual. San Antonio, TX: The Psychological Corporation.

APPENDIX A:

Letter Requesting Permission

Letter of Permission

Dr. Charles Lindsey
Director of Schools
Clarksville-Montgomery County Schools
501 Franklin Street
Clarksville, TN 37040

Dr. Mr. Lindsey:

In order to complete a field study at Austin Peay State University, I am requesting permission to examine and record data in the psychological files of the Clarksville-Montgomery County Schools. This field study is under the supervision of Dr. Susan Kupisch and is a requirement for completion of an Education Specialist Degree.

The purpose of my study is to compare WISC-R and WISC-III IQ scores in a group of learning disabled students. With the recent revision of the WISC-R, the WISC-III will likely be the most widely used cognitive measure. It is important for school psychologists to know the expectancies for stability of IQ when the WISC-III is administered to LD students. The subjects chosen will be those due for triannual reevaluations. The data recorded from the files will include age, gender, diagnosis at both evaluations, and Verbal, Performance, and Full Scale IQs at both evaluations. Additionally, I will ask to check those files against your list of children receiving free or reduced lunch benefits for an estimate of low SES.

The names of students will not be recorded, except for my personal handwritten copy. They will be entered into data storage for computer analysis only as numbers. Consequently, there is no possibility of risk or harm to the persons whose files I choose.

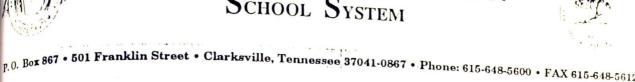
If permission is granted I will be collecting the data in the spring of 1992. Additionally, I wanted to clarify that although I am employed on a contract basis by the school system, this work will be done on my own time and not at your expense.

Sincerely,

Belinda Batie



Clarksville-Montgomery County School System



Jan G. Hodgson, Director Special Education

April 10, 1992

TO WHOM IT MAY CONCERN:

Belinda Batie has been given permission to examine the psychological files of the Clarksville-Montgomery County School System for the purpose of gathering data for her field study.

It is understood that no name, nor identification number, nor any other method of personal identification will be associated with this data in any way.

The anonymity of each person involved will be completely protected. The data gathered will be used only for the purpose of this field study.

Sincerely,

Jan G. Hodgson, Director Special Education

I understand and agree to abide by the provisions stated above.

Selinde & Atta & Malute Student,