INSTITUTE FOR RESEARCH IN LEARNING DISABILITIES
The University of Kansas
Lawrence, Kansas, 66045
Emphasis on Adolescents and Young Adults

THE DEVELOPMENT OF A SELF-RATING INSTRUMENT TO SCREEN FOR LEARNING DISABILITIES AMONG ADOLESCENTS AND YOUNG ADULTS

Gordon R. Alley, Donald D. Deshler,
Michael M. Warner, and Warren J. White

Research Report No. 59

June, 1982

The University of Kansas Institute for Research in Learning Disabilities is supported by a contract (#300-77-0494) with the Bureau of Education for the Handicapped, Department of Health, Education, and Welfare, U. S. Office of Education, through Title VI-G of Public Law 91-230. The University of Kansas Institute, a joint research effort involving the Department of Special Education and the Bureau of Child Research, has specified the learning disabled adolescent and young adult as the target population. The major responsibility of the Institute is to develop effective means of identifying learning disabled populations at the secondary level and to construct interventions that will have an effect upon school performance and life adjustment. Many areas of research have been designed to study the problems of LD adolescents and young adults in both school and non-school settings (e.g., employment, juvenile justice, military, etc.)

Director: Donald D. Deshler

Research Coordinator: Jean B. Schumaker

Institute for Research in Learning Disabilities
The University of Kansas
313 Carruth-O'Leary Hall
Lawrence, Kansas 66045

The preparation of this document was supported by a government contract. The views expressed here are those of the Institute, and do not necessarily reflect official positions of the Bureau of Education for the Handicapped, DHEW, USOE.

Acknowledgements

We wish to thank Mr. Tony Van Reusen who coordinated the data collection phase in Mesa, Arizona.

We are appreciative of the assistance provided by Dr. Sarah McCracken of LADSE who coordinated the data collection phase in the Chicago area.

We are indebted to Ms. Kendalene Crenshaw, who coordinated the data collection phase in Omaha, Nebraska. In addition we appreciate the work of Ms. Patricia Frampton, Ms. Jeanne Henry, Ms. Barbara Noughtin, Mr. Don Nelson, Ms. Vera Thomas, Ms. Anne Thompson, Mr. Scott Yahnke, Dr. Robert Schultze, and Ms. Kristin Freeman.

We wish to acknowledge the cooperative assistance of Barbara Simrau and the Project Ceal staff, and the administration and staff of Neddleton High School in Jonesboro, Arkansas.

The following IRLD staff members assisted in the development phase. They include: Drs. Frances Clark and Jean Schumaker. In addition, we wish to thank Dr. Laura Jordan, a special friend, who provided her insights and assistance to this phase of the study.

We wish to thank Dr. Steven Carlson, Mr. Jerry Keimig, and Ms. Karen Lyerla of Lawrence (Kansas) high school for their assistance.

Cooperating Agencies

Were it not for the cooperation of many agencies in the public and private sector, the research efforts of The University of Kansas Institute for Research in Learning Disabilities could not be conducted. The Institute has maintained an on-going dialogue with participating school districts and agencies to give focus to the research questions and issues that we address as an Institute. We see this dialogue as a means of reducing the gap between research and practice. This communication also allows us to design procedures that: (a) protect the LD adolescent or young adult, (b) disrupt the on-going program as little as possible, and (c) provide appropriate research data.

The majority of our research to this time has been conducted in school settings in both Kansas and Missouri. School districts in Kansas which have participated or currently are participating in various studies include: Unified School District (USD) 437 Auburn-Washburn; USD 384, Blue Valley; USD 204, Bonner Springs; USD 308, Hutchinson; USD 500, Kansas City; USD 469, Lansing; USD 497, Lawrence; USD 453, Leavenworth; USD 480, Liberal; USD 233, Olathe; USD 290, Ottawa; USD 305, Salina; USD 450, Shawnee Heights; USD 512, Shawnee Mission; USD 464, Tonganoxie; USD 202, Turner; and USD 501, Topeka. Interlocal agencies in Kansas which have participated include: the Central Kansas Cooperative in Education, Salina; the East Central Kansas Special Education Cooperative, Paola; and the South Central Kansas Special Education Cooperative, Pratt. Parochial schools involved in our studies include: Bishop Miege High School, Shawnee Mission; Bishop Ward High School, Kansas City, Kansas; and O'Hara High School, Kansas City, Missouri. The Kansas State Department of Education also has been helpful in our research efforts.

Studies are also being conducted in several school districts in Missouri, including Center School District, Kansas City; the New School for Human Education, Kansas City; the Kansas City, Missouri School District; the Lee's Summit School District; the Raytown School District; and the School District of St. Joseph. In addition, school districts in Beaverton, Oregon; Delta County, Colorado; Elkhart, Indiana; Houston, Texas; Jonesboro, Arkansas; Montrose County, Colorado; Omaha, Nebraska; and Ottumwa, Iowa, have also participated in our studies. The Iowa Department of Public Instruction also has been helpful in our research effort.

Agencies currently participating in research in the juvenile justice system are the Overland Park, Kansas Youth Diversion Project; the Douglas, Johnson, Leavenworth, and Sedgwick County, Kansas Juvenile Courts; and the judicial district serving the Pittsburgh-Parsons, Kansas area. Other agencies which have participated in out-of-school studies are: Penn House and Achievement Place of Lawrence, Kansas; Kansas State Industrial Reformatory, Hutchinson, Kansas; the U. S. Military; and Job Corps. Numerous employers in the public and private sector have also aided us with studies in employment.

While the agencies mentioned above allowed us to contact individuals and supported our efforts, the cooperation of those individuals--LD adolescents and young adults; parents; professionals in education, the criminal justice system, the business community, and the military--have provided the valuable data for our research. Our sincere appreciation is expressed to all those who have contributed information to our research effort. This information will assist us in our research endeavors that have the potential of yielding greatest payoff for interventions with the LD adolescent and young adult.

Abstract

The research described in this report represents the further development of a series of studies to develop and test screening procedures for learning disabilities (LD) among adolescent and young adult populations. In the present study, a checklist (in which students respond to self-statements concerning learning problems) was developed, and data were collected pertaining to the reliability and validity of the checklist. The classification of students remained similar for most students across two successive administrations of the checklist. The validity of the checklist was only partially supported. The checklist was effective in discriminating LD students from normally-achieving students, but less effective in discriminating between LD and low-achieving students. Classification by the checklist was more closely related to actual academic achievement than it was to school-based LD classification.

THE DEVELOPMENT OF A SELF-RATING INSTRUMENT TO SCREEN FOR LEARNING DISABILITIES AMONG ADOLESCENTS AND YOUNG ADULTS

There is a need in the field of learning disabilities for effective and efficient procedures to identify learning disabled (LD) adolescents and young adults. Consistent with this need, the University of Kansas Institute for Research in Learning Disabilities (IRLD) has established as one of its major goals the development and validation of efficient identification strategies applicable to both school and nonschool settings . Research has been conducted by the present authors to address this need by developing a teacher checklist which has been useful in screening for learning disabilities (Alley, Deshler, Mellard, & Warner, 1980a; Alley, Deshler, Mellard, & Warner, 1980b; Alley, Deshler & Warner 1979; Alley, Deshler, & Warner, 1981; Deshler, Alley, Mellard, & Warner, 1980). The present effort is designed as a further extension of previous work through the development of a checklist that can be completed by an adolescent or young adult and that is a self-rating of characteristics highly related to learning disabilities. A rationale for the development of the self-rating instrument can be divided into two issues: (a) those pertaining to public school settings, and (b) those pertaining to nonschool settings.

Traditionally, handicapped students, including LD students, have been identified in school through a process that begins with teacher referral (McLoughlin & Lewis, 1981). This referral often is followed by the administration of formal tests and the subsequent selection and placement of students in special settings for part or all of their school day. One problem with this process is that the students themselves often have been omitted from the

decision-making process. Specific regulations which pertain to the identification of LD students and which supplement Public Law 94-142 are designed, in part, to include the student in the decision-making process. Specifically, the regulations of PL 94-142 state that, where appropriate, the student should be included in meetings where placement decisions are made (Federal Register, August 23, 1977). When students reach adolescence, their participation in determining their educational needs is both appropriate and desirable. By asking students to complete a self-rating checklist, their participation is established early in the evaluation process. The information obtained could be used either to confirm or to contradict information provided by other sources.

In addition to the need for student participation, self-rating instruments have potential value because other procedures, by themselves, may not be adequate. For example, Meyen and Moran (1979) stated that "unless regular class teachers are skilled in observational techniques and know what to look for, the mildly handicapped child may not be identified until the problem increases in severity . . ." (p. 527). If teachers are neither trained in observational techniques nor told which student behaviors are indicative of learning disabilities, then they may under-refer LD students. Under-referral of handicapped children is considered a serious problem by the Bureau of Education for the Handicapped (Morra, 1978). A self-rating checklist would allow a student to refer herself/himself.

In addition to the need for a self-rating instrument to be used in school settings, there is a need for such an instrument to use in out-of-school settings, including the military, employment settings, and settings associated with the juvenile justice system, including the courts and prisons.

There is a growing awareness that the effects of learning disabilities often can be pervasive and long lasting. LD adolescents and young adults can be found in out-of-school settings. Unfortunately, in these settings, there may be no professionals knowledgeable of their clients' performances with respect to academic skills and/or knowledgeable of the characteristics indicative of learning disabilities. Prior to the blanket administration of formal tests to clients (an expensive procedure), the self-ratings of these clients with respect to their academic abilities may be both valuable and efficient in terms of an initial screening activity. The screening process should be followed by the administration of formal and informal tests to confirm the existence of a learning disability.

In summary, a rating instrument to which students or clients can respond to statements of academic problems identical or similar to their own could be a useful component of screening for learning disabilities. The present research was conducted to develop a screening instument for students and to apply preliminary tests of the reliability and validity of this instrument. The following research questions were addressed:

1. Can a self-report checklist be developed so that adolescents can provide judgments similar to the judgments of teachers?

2. Do secondary students provide reliable self-report judgments on a checklist (i.e., temporal reliability)?

3. Do adolescent students representing three groups (LD, Low Achievers, Normal Achievers) provide self-report judgments on a checklist that are sensitive to the distinctions among groups, as evidenced by the total number of items endorsed?

4. Are group classifications (LD, non-LD) based on the self-report instrument similar to group classifications made by school personnel?

Method

Subjects

Students. Data were gathered from three groups of students located in several states. The first group of 155 students was drawn from schools in Arizona and Illinois and included students in grades seven through twelve. These students will be referred to as the Original Group. They were classified into three subgroups using the following criteria:

Learning Disabled (LD)

1. Must be identified as LD by district personnel using PL 94-142 regulations criteria and evaluation procedures
2. Must be enrolled currently in a categorical special education resource room for LD students
3. Must be enrolled in the categorical resource room for at least one class hour per day, but not more than 50% of each school day.

Low Achievers (LA)

1. Must be achieving below the thirty-third percentile on grade-based norms as indicated by the composite score on the most recently administered achievement battery
2. Must have scored at or above the second percentile on age-based or grade-based norms as indicated by the composite or total scale score on the most recently administered group ability measure (whichever was appropriate)
3. No permanent evidence of ever having been referred for special education service, other than giftedness
4. Must have received one or more failing grades in content subjects during the most recent semester reporting period.

Normal Achievers (NA)

1. Must have achieved above the thirty-third percentile on grade-based norms as indicated by the composite score on the most recently administered achievement battery
2. Must have scored at or above the sixteenth percentile on age-based or grade-based norms as indicated by the composite or total scale score on the most recently administered group ability measure (whichever was appropriate)
3. No permanent evidence of ever having been referred for special education services, other than giftedness.

Using these criteria, 76 LD students, 38 LA students, and 41 NA students were selected to be included in the Original Sample.

Two groups of subjects were obtained from schools in Nebraska and Arkansas. The 30 Nebraska subjects met the classification criteria for inclusion in the LD subgroup. This Nebraska group included students enrolled in grades 7 through 9. A subject pool drawn from Arkansas consisted of 20 senior high school students classified as LA using the Original Group requirements.

Teachers. Teachers also were included in the investigation. Those included were the teachers of students in the Original Subject pool. They included English, social studies, and LD teachers. All LD teachers possessed either provisional or permanent LD certification in their respective states. All the regular classroom teachers possessed permanent certification in the subject area they were teaching.

Procedures for obtaining consent of the students, their parent(s)/guardian(s) and the teachers included informing them about the study and obtaining their written consent.

Measurement Systems

Checklist of Academic Problems (Secondary Checklist). The self-rating checklist developed as part of this study represented a modification of the Secondary Checklist (Alley et al., 1979; Alley et al., 1981). The Secondary Checklist was developed for use by language arts teachers when screening learning problem secondary students for suspected learning disabilities. Alley et al. extended the previous work of Wissink, Kass and Ferrell (1975) when developing the checklist; they identified 71 component disabilities attributed to secondary learning disabled students from a review of the research and conferences with learning disabilities teachers. A checklist then was constructed to be used by teachers to rate the secondary students in their classes.

In completing a checklist, the teacher judges the presence or absence of a series of target behaviors manifested by the student under consideration. Included among these target behaviors are several that pertain to four component disabilities that highly discriminate LD from non-LD students: Word Recognition, Word Attack, Monitoring Spelling Errors, and Math Algorithms. Based on the teacher judgments, a probability can be assigned to a given student regarding the presence of learning disabilities. For example, if a teacher indicated that a student had problems associated with three of the four highly discriminating component disabilities, that student would be assigned a high probability of being classified as learning disabled (a complete copy of the Secondary Checklist is provided in Alley et al., 1981).

Self-Rating Student Checklist (SRSC). The SRSC was constructed during the fall of 1980. The directions, items, and format of the Secondary Checklist were modified to be appropriate for self-administration by secondary school students. The modifications included the reading difficulty of the

directions and item content, the explicitness of the directions, and the content validity of the measure. A copy of the SRSC is provided in Appendix A.

A set of consumer validity items also was constructed and was included as part of the SRSC. This part of the SRSC consisted of Likert-type questions and open-ended questions that addressed the social validity of the SRSC. In this section, students were asked to respond to questions related to the efficiency and applicability of the checklist as well as questions related to format, difficulty, and student interest.

Content validation of the SRSC was conducted as follows. Three LD senior-high school teachers and the LD coordinator of a federally-funded Child Service Demonstration Center located in a high school volunteered to match items on the Secondary Checklist with those on the SRSC. A decision rule was made that three of the four judges must agree on an item match. If this criterion was not met, the investigators modified the item on the SRSC until the criterion was met. Only three items did not meet criterion on the first matching trial. Two items were then modified and met the criterion on the second matching trial. After a discussion with the judges, the third item from the "writing" component disability was moved to the "test taking" component disability.

Modified SRSC. This modified version was developed for use when screening Job Corps members and U. S. Army enlistees as part of other IRLD projects. A copy of the modified SRSC is provided by Alley et al. (1981). In the present study, the Arkansas sample was screened using the modified SRSC.

The modifications in this version of the checklist were:

1. The directions and items were rewritten at a reading level no higher than a 3.5 grade level (The original SRSC directions were

written at a 6.5 reading level and were judged too difficult for certain non-school populations.).

2. One item was included that provided a sentence written at the 3.5 grade level. The respondent was asked to read the sentence and then to choose one of the following alternatives related to the student's ability to read sentences of similar complexity:

> Some people find sentences like this hard to read: "The palm nut, from which oil is made, is one of the Congo's leading products."
>
> a. always a problem for me
>
> b. often a problem for me
>
> c. not often a problem for me
>
> d. not a problem for me

If the student/young adult endorsed either response a or b, the SRSC was administered orally. The item was included to account for persons with extremely poor reading skills.

3. The consumer validity items were changed to reflect the Job Corps or U. S. Army setting. For example, a specific refer ence to "your teacher" of the SRSC was removed.

Procedures

The SRSC was administered to all three classifications of students (LD, LA, and NA) in the Original Sample. Students were administered the SRSC in small groups at a location specified by the building principal and/or site coordinator. A site coordinator from each school district supervised the administration of the SRSC with a teacher or administrator from each building.

The administration was completed during one class period. The site coordinator or teacher distributed the checklists, provided the initial instructions, and answered student questions during the administration.

English/language arts, social studies, and LD teachers were asked to complete one Secondary Checklist for each student who was in their class(es) and also in the study. The students in the LA and NA groups of the Original Subject pool were administered the SRSC in the regular classroom. The LD students in the Original Subject pool were administered the SRSC in the LD resource room. Two to three weeks after the initial administration of the SRSC, 27 students were readministered the SRSC for the purpose of determining test-retest reliability.

The Nebraska sample included only LD students. The procedure was modified to have only the English/language arts junior high school teachers complete the Secondary Checklist on LD students in their classes. The students were administered the SRSC in the English/language arts classroom in small groups. This was done to determine if the setting in which the SRSC was completed (LD resource room) had influenced the students' perceptions and responses in the Original Sample. Wide Range Achievement Test reading scores were selected from these LD students' cumulative folders. These achievement test scores were collected after the data from the Original Sample had been analyzed. Analysis of the test scores was not planned originally but was deemed necessary after a low correspondence was found between teacher and student checklist data for the LD students in the Original Sample. The specific analysis of this test data is discussed under Post-Hoc Results.

The Modified SRSC was administered to students in the Arkansas sample by English/language arts senior high school teachers. The Modified SRSC was used because it contained consumer validity questions. The checklist was administered in small groups during the students' regularly scheduled classes. The teachers distributed the checklists, read the instructions, and answered

student questions. As with the Nebraska sample, individual achievement test data were collected for each student. In this case, each student was administered the Written Language Cluster of the Woodcock Johnson Psycho-educational Battery by appropriately trained school personnel. This particular test was chosen because of its high predictive validity with respect to school-based LD classification (Warner, Schumaker, Alley & Deshler, 1980).

Results

Similarity of Students' and Teachers' Judgments

For all results, a student was classified as having probable learning disabilities, based on SRSC or Secondary Checklist responses, if at least one item was checked under three of the four high-discriminating components. These components are described by Alley et al. (1979) and are labeled the Word Attack, Word Recognition, Math Algorithms, and Monitoring Spelling Errors components.

For each of the three groups in the Original Sample, 2 X 2 contingency tables were constructed to represent the correspondence between classification status provided by the two instruments (see Tables 1, 2, and 3). For the NA group, 34 of 41 students (83%) were classified as non-LD by both instruments (see Table 1). For the LA group, 24 out of 38 (63%) were classified in the same status by the two instruments (see Table 2). Finally, for the LD group (see Table 3), 33 out of 48 students (69%) were classified identically by both instruments.

Additional data concerning the correspondence of classification by the teacher and student forms of the checklist is provided by the Nebraska sample. This information is presented in Table 4. Based on a sample of 26 junior high LD students, 14 of these students (54%) were classified identically using both instruments.

Student Reliability

The reliability of the SRSC was studied using a Chi-square test of independence between a test and retest session. Twenty-seven students of the Original Group were retested on the SRSC after a two-week interval. These 27 students included 9 LD, 9 LA and 9 NA students.

The contingency table associated with the Chi-square test is presented in Table 5. The obtained Yates' corrected Chi-square value was 7.292, df = 1; p = .007). Some caution is in order in the interpretation of this statistic since three of the cells had expected cell frequencies of less than 5.0. Twenty-four of 27 students (89%) were classified similarly on both initial testing and retesting. At both testing times, the majority of students were classified as non-LD, based on their responses.

SRSC Discrimination Power

Both research questions three and four concerned the power of the SRSC to discriminate among groups. Question three was designed specifically to test the efficacy of an alternative scoring procedure with respect to group discrimination. This alternative scoring procedure was different from Bayesian scoring in that (a) each item of the thirty-one items was equally weighted, and (b) the strength of each item response (rather than merely the direction of the response) was taken into consideration. Specifically, under question three, a person's score was determined by first calculating the mean response of each student on the items to which they actually responded (i.e., missing items were eliminated). Then, each student's mean was arbitrarily multiplied by 31 (the total number of items on the SRSC). This particular procedure was used to determine if such a traditional metric would provide information different from that provided by the Bayesian criterion.

The means and standard deviations for the three groups in the Original Sample are presented in Table 6. The results of the analysis of variance are presented in Table 7. The overall F test was significant at alpha = .02. The Newman-Kuels procedure was used to make pair-wise comparisons among the three means. At alpha = .05, only the contrast between the NA and LA groups was significant. This result can be interpreted to mean that when a traditional, non-Bayesian metric is employed, the SRSC does possess power to differentiate groups but not between the groups of clinical interest, i.e., LD and LA, LD and NA.

The fourth research question was also concerned with the ability of the SRSC to discriminate among groups. Data from all three of the samples provided information relevant to the fourth research question. Classifications of the Original Sample based on the SRSC are presented in Table 8. A Chi-square test of independence was used to determine if there were differences in the proportions of each of the three groups classified as LD. The test yielded a Chi-square value of 9.69 (df= 1; p = .008). This statistically significant value apparently reflects a difference among the proportions of students in the NA group considered LD by the checklist in contrast to the proportion of students in LA and LD groups considered LD.

Of the 48 LD students in the Original Sample, only 15 (31%) responded to the SRSC in such a way that they were classified as LD. Similarly, for the Nebraska sample, only 10 of 26 school-identified LD students (38%) were classified as LD using the SRSC (see Table 4).

For the Arkansas sample, data on the Modified SRSC were available for 33 high school students. Thirteen LA students and 20 LD students were included. The criterion used for classification as LD by this instrument was more

conservative. In addition to endorsing three of four high discriminating components, the student also must have checked at least one item under each of four high frequency components, i.e., Test Taking Skills, Study Skills, Organization of Written Materials, and Writing Themes of Adequate Length. Using this criterion, 11 of the 20 LD high school students (55%) were classified as LD using the Modified SRSC (see Table 9).

Post Hoc Results

Although not presented as research questions in the planning phases of this study, the relationships between the SRSC and Modified SRSC and formal tests of basic skill achievement also were determined. As discussed earlier, the correspondence between the teachers' and students' ratings was not very high for the LA and LD groups. It seemed advisable, therefore, to seek data on the validity of student ratings, independent of teacher judgments. For the Nebraska sample of 26 LD students, grade equivalence scores were available from the reading test of the Wide Range Achievement Test. The point biserial correlation between these scores and the SRSC classifications (LD or NLD) was -.52. That is, the higher the reading score, the less likely was the LD classification using the SRSC. A correlation of -.52 is significantly different from 0.0 at alpha = .01 for this sample size.

For the Arkansas sample, test scores were available from the Written Language Cluster of the Woodcock-Johnson Psycho-educational Battery (WJPB). Students were classified as LD based on the WJPB if their cluster score was at or below 505. This cut-off score was chosen on the basis of an earlier epidemiological study carried out by the IRLD (Warner et al., 1980), in which the Written Language Cluster was found to discriminate LD students from other low-achieving students. Then, a comparison was made between classifications

according to the WJPB and the Modified SRSC. The results of these comparisons were represented in Table 10. For the low-achieving group, 12 of 13 (92%) were classified similarly by both instruments. For the LD group, 19 out of 20 (95%) were classified similarly.

Although sample sizes are small, these results suggest that the SRSC and Modified SRSC can provide valid estimates of students' achievement on formal achievement measures, both among LD and among LA students.

Discussion

Public Law 94-142 provides for a comprehensive evaluation in the identification of LD children and adolescents. Multiple scources of data are to be synthesized during the evaluation process, including information the student may provide concerning his/her handicapping condition. To meet the need for obtaining self-generated information from adolescents and young adults, a checklist was developed and modified. Data pertaining to the reliability and validity of the checklist were collected in a number of different settings.

Concerning the validity of the checklists, three generalizations can be made. First, it appears that the checklists were effective primarily in discriminating between the NA students on the one hand and the LA and LD students on the other. This is reflected in the results related to research questions three and four. Second, the criteria used to identify LD students based on checklist results appear to be very conservative when compared to school identification criteria. Based on data associated with research questions one, two, and four, only one-half (or less) of school-identified LD students were identified as LD using the checklists. The third conclusion concerns the promising implicatons of the relationships between achievement test scores and the SRSC. The number of students sampled was very small. Nevertheless, the preliminary indication is that the self-reports of the

students reflect their awareness of their levels of achievement in basic skills. Because such basic skill deficits are highly associated with the condition of learning disabilities (Warner et al., 1980), the results provide positive support for the assertion that the checklists are valid, at least for the purposes of screening the lowest achievers from a larger sample.

Procedures associated with the collection of data in the original Nebraska and Arkansas samples differ across a number of dimensions. These included geographic area sampled, age of the students, type of teacher completing the Secondary Checklist (LD vs. regular class teacher), and the locations in which the Secondary Checklist and the SRSC were completed (resource room vs. the regular class). In spite of these differences in procedures, the results obtained for the three samples were more similar than different. In the Original Sample, 31% of the school-defined LD students' responses led to a designation of LD based on the SRSC. For the Nebraska sample, the percentage was 38%. For the Arkansas sample, in which high school students completed the Modified Checklist, 55% of the school-identified LD students classified themselves as LD. This occurred in spite of the more conservative LD classification criterion used with the Arkansas sample. Similarly, based on the Secondary Checklist, LD teachers classified 29% of school-defined LD students as LD in the Original Sample. For the Nebraska sample, the percentage was 38.

A major concern of educators in the field of learning disabilities has been the need for efficient and valid procedures to identify adolescents and young adults. Because of the unique setting demands and constraints of secondary schools and nonschool settings, valuable information regarding learning problem individuals may be incomplete or unavailable. For example,

the diffusion of responsibility for each secondary student's total academic development often results in no one teacher having adequate and complete knowledge of a student's abilities and performance. Compiling the information necessary for placement and programming decisions from all professionals with some knowledge of the student is difficult and sometimes is impossible. Within nonschool settings, agencies attempting to serve the learning disabled often have little background information about new clients. Gathering this information is very time-consuming and costly. Thus, a self-rating checklist that could be completed by students or young adults in out-of-school settings would be a useful tool for various professionals who are faced with the problem of identifying LD individuals. The data reported herein suggest that it is possible to construct such an instrument that meets standards of reliability and validity as they apply to a screening process.

References

Alley, G. R., Deshler, D. D., Mellard, D. F., & Warner, M. M. Reliability and validity of the Bayesian identification procedure for learning disabled adolescents (Research Report No. 10). Lawrence, KS: The University of Kansas Institute for Research in Learning Disabilities, 1980. (a)

Alley, G. R., Deshler, D. D., Mellard, D. F., & Warner, M. M. A multi-trait, multi-method analysis of the Bayesian screening instrument and test battery for LD adolescents (Research Report No. 11). Lawrence, KS: The University of Kansas Institute for Research in Learning Disabilities, 1980. (b)

Alley, G. R., Deshler, D. D., & Warner, M. M. Identification of learning disabled adolescents: A Bayesian approach. Learning Disability Quarterly, 1979, 2, 99-102.

Alley, G. R., Deshler, D. D., & Warner, M. M. The Bayesian screening procedure for identification of learning disabled adolescents: Administration, scoring and interpretation (Research Monograph No. 10). Lawrence, KS: The University of Kansas Institute for Research in Learning Disabilities, 1981.

Deshler, D. D., Alley, G. R., Mellard, D. F., & Warner, M. M. The homogenity of identification decisions by different groups on LD adolescents (Research Report No. 9). Lawrence, KS: The University of Kansas Institute for Research in Learning Disabilities, 1980.

Education of Handicapped Children: Implementation of Part B of the Education of the Handicapped Act. Part II: DHEW: OE. Federal Register, August 23, 1977.

McLoughlin, J. A., & Lewis, R. B. Assessing special students: Strategies and procedures. Columbus, Ohio: Merrill, 1981.

Meyen, E. L., & Moran, M. R. A perspective on the unserved mildly handicapped. Exceptional Children, 1979, 45, 526-530.

Morra, L. G. (Ed.) PEP: Developing criteria for the evaluation of protection in evaluation procedures provisions. Washington: DHEW-OE-BEH, 1978.

Warner, M. M., Schumaker, J. B., Alley, G. R., & Deshler, D. D. Learning disabled adolescents in public schools: Are they different from other low achievers? Exceptional Education Quarterly, 1980, 1(2), 27-36.

Wissink, J. F., Kass, C. E., & Ferrell, W. R. A Bayesian approach to the identification of children with learning disabilities. Journal of Learning Disabilities, 1975, 8, 158-166.

Table 1

Frequencies Associated with Classifications based on the Secondary Checklist and SRSC - Original Normally - Achieving Sample

Secondary Checklist	SRSC: Not LD	SRSC: LD	SRSC: Total
Not LD	34	3	37
LD	4	0	4
Total	38	3	41

Table 2

Frequencies Associated with Classifications based on the Secondary Checklist and SRSC- Original Low - Achieving Sample

Secondary Checklist	SRSC: Not LD	SRSC: LD	Total
Not LD	19	8	27
LD	6	5	11
Total	25	13	38

Table 3

Frequencies Associated with Classifications based on the Secondary Checklist and SRSC - Original Learning Disabled Sample

Secondary Checklist	SRSC: Not LD	SRSC: LD	Total
Not LD	26	8	34
LD	7	7	14
Total	33	15	48

Table 4

Frequencies Associated with Classification based on the Secondary Checklist and SRSC - Nebraska LD Sample

Secondary Checklist	SRSC: Not LD	SRSC: LD	SRSC: Total
Not LD	10	6	16
LD	6	4	10
Total	16	10	26

Table 5

Temporal Reliability of SRSC Classifications

		Test		
		Not LD	LD	Total
Retest	Not LD	21	3	24
	LD	0	3	3
	Total	21	6	27

Table 6

Means and Standard Deviations Associated with Total Score on the SRSC

	Groups		
	Normal Achiever	Low Achiever	Learning Disabled
$\bar{X}$	93.46	84.39	88.19
SD	11.52	14.92	15.23
N	41	38	48

Table 7

Analysis of Variance Using Total Scores on the SRSC

Source	SS	DF	MS	F value	P
Classification	1646.08	2	823.04	4.17	.018
Error	24452.57	124	197.20		
Total	26098.65	126			

Table 8

Classification of Each of the Three Original Groups based on the SRSC

Actual Group Membership

SRSC Classification	Normal Achiever	Low Achiever	LD	Total
Not LD	38(93)*	25(66)	33(69)	96
LD	3(7)	13(34)	15(31)	31
Total	41(100)	38(100)	48(100)	127

* Numbers in parentheses indicate column percentages.

Table 9

Frequencies Associated with the Modified SRSC for the Arkansas Sample

Modified SRSC	Actual Group Membership: LA	LD	Total
Not LD	8	9	17
LD	5	11	16
Total	13	20	33

Table 10

Frequencies Associated with Classification based on the SRSC and the Written Language Cluster of the WJPB

Low Achiever

SRSC

Written Language Cluster	Not LD	LD	Total
Not LD	8	1	9
LD	0	4	4
Total	8	5	13

LD

SRSC

Written Language Cluster	Not LD	LD	Total
Not LD	9	1	10
LD	0	10	10
Total	9	11	20

APPENDIX A

Date:_____/_____/_____

_____
(Student's name)

_____
(Student's birthdate)

_____
(Student's sex) (Grade)

_____
(Teacher's name)

SELF RATING STUDENT CHECKLIST
(revised 1-24-80)

The statements on these pages describe areas that cause problems for some people when they are studying for their classes and tests. Under each statement are the answers: A SERIOUS PROBLEM FOR ME; FREQUENTLY A PROBLEM FOR ME; RARELY A PROBLEM FOR ME; and NOT A PROBLEM FOR ME. Each statement will be read, one at a time. You will be given time after each statement to mark the answer that describes how much of a problem this area causes you. Since all situations are not the same, give the answer that would describe you most of the time. For example, if the statement is "Some people doodle instead of taking notes" and you doodle instead of taking notes only once in a while, check RARELY A PROBLEM FOR ME. If you almost always doodle and this prevents you from taking notes, you would check A SERIOUS PROBLEM FOR ME. Your answers will not be shown to your teachers or to other students, so please answer each statement honestly.

1. Some people seem to have the ability to do well in school but still have problems doing their schoolwork.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

2. When asked to write a research paper, some people have trouble making them long enough.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

3. Although some assignments are easier than others, some people read all assignments at about the same rate.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

4. Some people miss items on tests because they don't check their answers.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

5. It is difficult for some people to break up hard words into their parts: for example, candidate into can-di-date, or reporter into re-port-er.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

6. Some people cannot find mistakes in their own writing.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

7. Some people cannot sound out words they do not know.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

8. Some people have a difficult time using math conversion rules; for example changing dollars to cents, inches to yards, or minutes to hours.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

9. Some people have trouble recognizing specialized words like photosynthesis in science class, radius in geometry class, or irony in English class.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

10. Some people do not recognize "give-away" questions on tests until they are pointed out.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

11. Some people do not look over a whole assignment before reading it carefully.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

12. Some people have trouble deciding how to organize their work into paragraphs.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

13. Some people do not take good notes in class.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

14. Some people miss items on tests because they do not read the directions carefully.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

15. Some people cannot guess the meaning of a word by reading the rest of the sentence.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

16. It is difficult for some people to write a paragraph that hangs together and makes sense.

_____ A SERIOUS PROBLEM FOR ME

_____ FREQUENTLY A PROBLEM FOR ME

_____ RARELY A PROBLEM FOR ME

_____ NOT A PROBLEM FOR ME

17. Some people do not review their notes and assignments before a test.

_____ A SERIOUS PROBLEM FOR ME

_____ FREQUENTLY A PROBLEM FOR ME

_____ RARELY A PROBLEM FOR ME

_____ NOT A PROBLEM FOR ME

18. Some people do not know how to look things up or use reference material (for example, encyclopedias and dictionaries).

_____A SERIOUS PROBLEM FOR ME

_____FREQUENTLY A PROBLEM FOR ME

_____RARELY A PROBLEM FOR ME

_____NOT A PROBLEM FOR ME

19. It is hard for some people to take several ideas and put them in order.

_____ A SERIOUS PROBLEM FOR ME

_____ FREQUENTLY A PROBLEM FOR ME

_____ RARELY A PROBLEM FOR ME

_____ NOT A PROBLEM FOR ME

20. Some people have trouble writing themes in English class that teachers think are long enough.

_____A SERIOUS PROBLEM FOR ME

_____ FREQUENTLY A PROBLEM FOR ME

_____ RARELY A PROBLEM FOR ME

_____ NOT A PROBLEM FOR ME

21. It is difficult for some people to follow a series of written directions.

_____ A SERIOUS PROBLEM FOR ME

_____ FREQUENTLY A PROBLEM FOR ME

_____ RARELY A PROBLEM FOR ME

_____ NOT A PROBLEM FOR ME

22. Some people have trouble keeping information organized.

_____ A SERIOUS PROBLEM FOR ME

_____ FREQUENTLY A PROBLEM FOR ME

_____ RARELY A PROBLEM FOR ME

_____ NOT A PROBLEM FOR ME

23. Some people do not know how to ask questions about new material.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

24. Some people have trouble organizing words like knowledge, suggestion, and selected.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

25. Some people have difficulty using graphs in solving math problems.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

26. It is difficult for some people to follow a series of spoken directions.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

27. When taking a multiple choice spelling test, some people cannot pick out the words spelled right from those that are spelled wrong.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

28. It is hard for some people to pick out important ideas in order to summarize a reading assignment.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

29. Some people do not use their study time wisely.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

30. When some people come to a word they cannot read, they do not know how to figure it out.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

31. Before a test some people do not ask what a test will cover or attend review sessions outside of class.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

32. Some people are absent from school a lot.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

33. Some people find it difficult to pay attention for 10 or 15 minutes without getting distracted.

_____ A SERIOUS PROBLEM FOR ME

_____ FREQUENTLY A PROBLEM FOR ME

_____ RARELY A PROBLEM FOR ME

_____ NOT A PROBLEM FOR ME

34. Some people have a difficult time being well behaved in a group (i.e., Classroom) even when being corrected.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

35. Some people have a difficult time being well behaved when working with the teacher or another person alone even when being corrected.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

36. Some people have a difficult time getting motivated or interested in studies.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

37. Some people have difficulty completing work to the teacher's liking, even when the lesson or book is easy to read.

____ A SERIOUS PROBLEM FOR ME

____ FREQUENTLY A PROBLEM FOR ME

____ RARELY A PROBLEM FOR ME

____ NOT A PROBLEM FOR ME

38. Were the directions to this form clear to you?

Not Clear 1 2 3 4 5 6 7 Clear

39. How important do you think filling out this form is to you and your teacher?

Not Important 1 2 3 4 5 6 7 Important

40. How do you feel about filling out this form?

41. What percent of persons do you think have serious trouble with school work because they have some of the problems listed above?

_____ %

Please list the classes you are currently in, the grade you are receiving and add any comments on how you think you are doing, what problems you might be having and the reasons, etc. Note the example:

EXAMPLE

Class	Current Grade	Notes on Progress or Problems
Life Science 7	F	The teacher doesn't talk on our level. I don't study enough.