

**COMPARATIVE VALIDITY THE FOURTH VERSION HAS  
COMPLETED THE WISC-R INTELLIGENCE SCALE WITH THIRD  
EDITION SCALE COGNITIVE ABILITIES WOODCOCK JOHNSON  
THE LEARNING DISABLED STUDENTS**

**Tahmineh Changizi\***

**Kambizkamkary\*\***

**Farah Naderi\*\*\***

**Abstract**

The present study comparative validity finishing fourth version of the wechsler Intelligence Scale. The third edition of cognitive ability Woodcock johnson test The learning disabled students Ahwazcity. The study population included all male and female students with learning disabilities from first grade to fifth grade elementary Ahwaz. 2013-2012 of the academic year public and private institutions of learning specific problems of special education services - treatment received. The research sample consisted of 60 students who had learning disabilities were selected using purposive sampling. Data collection was completed in the fourth edition of the Wisc-r Intelligence Scale-Third Edition Woodcock johnson test was used to measure cognitive ability. The research design was a descriptive cross-sectional comparison. Field methods to gather information and run individually and was face to face; For the data analysis, descriptive statistics such as frequency, percentage, mean, standard deviation ;ROC curve sensitivity coefficient and the coefficient of determination clearly oriented and confirmatory factor analysis was used to determine the validity lisrel software.

Keywords: diagnostic validity -fourth edition of the Wechsler Intelligence Scale - Third Edition cognitive abilities Woodcock johnson test

\* Corresponding Author: Tahmineh Changizi, M.A. in General Psychology, Khuzestan Science and Research Branch, Islamic Azad University, Ahvaz, Iran

\*\* PhD, faculty of Islamic Azad University, eslamshaherBranch, Tehran, Iran

\*\*\* Assistant Professor Department of Psychology, Khuzestan Science and Research Branch, Islamic Azad University, Ahvaz, Iran

**Introduction:**

A complication is that on the one hand with intelligence construct and the other deals with learning structures, learning disabilities (Askarian and Saghrchyan, 2009). Learning disabilities of the most challenging problems in the field of psychology and education. These disorders are typically diagnosed based on the use of assessment tools, are intelligence (Satlr, 2001). Studies show that discriminating between individuals with the disorder, according to intelligence is difficult to measure (Grshham and Vlvtyv 2010, Kaufman and Lychtnbrgr, 2000). A large amount of research shows that despite the utility of measuring intelligence, the means for the diagnosis and classification of people in this area are not yet widely used of these tools (Hall, 2010).

The term "specific learning disability" refers to the inability of a group of children in one or more of the basic psychological processes involved in understanding or use of verbal or written language that they are impaired; The disorder may inability to listen, think, speak, read, write, spell, or do mathematical calculations to be manifested. This term complications such as perceptual disabilities, brain injury, mild brain dysfunction, dyslexia and aphasia growth is included. But what kinds of learning problems that are primarily the result of visual impairment, auditory, motor, mental retardation, emotional disturbance, or environmental conditions, economic, cultural, or does not (Lerner, 1997 E. Translation of 2011).

Increasing numbers of people with learning disabilities, due to the development and expansion of definitions and diagnostic tools diagnosis of learning disability, has attracted the attention of several research areas. Currently between 1 to 30 percent of the population prevalence of learning disorders in school (Psychological Society of America, 2000; Grsham, 2002) has been estimated and is considered one of the most common disorders known. In the last ten years has increased by 38 percent for students with learning disabilities (Gorman, 2000, translated by Narimani and Dgrmandroq, 2002).

Learning disabilities seem to lifelong effects for causes that go beyond reading, writing and mathematics, and areas such as mental health, interpersonal relationships (Shahim, 2003) to study the impact of employment and job etceteras puts. The etiology of learning disorders can be effective in identifying, organizing, intervention and rehabilitation disorder (VachonKartlon and Shaw, 1991 quoted in terms of Siah and Kuti2012).

Recognize the importance of these areas so that Levinson (1986) is one of the main objectives in the field of assess learning states. Identifiable early planning and early intervention for children can prevent the various problems (Bantyn and Kaslnbadr, 1997). Early recognition and treatment of these disorders in order to prevent negative outcomes such as academic failure of successive disorder, low self-esteem, feelings of personal inadequacy, depression, conduct disorder, apathy towards education, and the failure of the social and employment, etc., is important (Kakavand, 2006 a).

Several studies educational barriers for students with learning disabilities were examined and lack of appropriate academic skills and strategies appropriate academic, social and emotional problems and the reduction of barriers to academic progress of students in the study described above (Fraser, Yangsrvm, Glatyn and Vatkyms, 2007). One of the main problems is the inability to detect learning disabilities (McKinney, 1988, Flayno et al, 1992, quoted by Westwood (1997) Translation and ShylandryMakvandiHusseini, 2002).

The main methods of identifying and diagnosing learning disabilities, methods of observation, interviews (by history and questionnaire), and the use of psychological tests (Kakavand, 2006; SeifNaraghi1999rare, rare SeifNaraghi 1389). Major point is that specialists have obtained information from different modalities like pieces of a puzzle put together with a certain elegance and artistry, to complete a diagnostic dilemma (and rare SeifNaraghi2010).

This study was located in the area of applied research in order to identify and evaluate psychological learning disabilities used to be. According to what was said above, the researcher intends to compare the diagnostic validity of the fourth edition of the complete Wechsler Intelligence Scale Laboratory Tehran - Stanford - Binet Ahwaz engage students in learning disabilities.

### **Methods:**

The aim of the present study was based on the area of research and in terms of causal-comparative research design is descriptive. The study population included all male and female students with learning disabilities from first grade to fifth grade elementary Ahwaz specific learning problems that public and private institutions, especially education and health services, the city received. This sample consisted of 60 male and female students from the community was that of purposive sampling to select the available was used. All statistical population, despite having normal intelligence and physical health, mental, emotional and academic problems are.

The sampling method was that the first of the four main areas of education Ahwaz region (region 4) was selected then the students studying the area, the public and private two-sample choose

**Research Tools:** The following tools are used in research to measure.

- Completion of the fourth edition of the Wechsler Intelligence Scale
- Third Edition Scale cognitive abilities Woodcock johnson

**Methods of data analysis**

In order to analyze the data in this research of statistical methods were used:

- 1 - Methods of descriptive statistics such as frequency, percentage, mean, and standard deviation.
  - 2 - ROC curve sensitivity coefficient and the coefficient of determination clearly oriented
  - 3 - confirmatory factor analysis to determine the validity of software Lyzral
- Data analysis for the eighteenth edition of spss software is used. Also significant in this study,  $\alpha=0/05$  is determined

**Results:**

In this study, according to the research topic ((compare the diagnostic validity of the fourth edition completed the third edition of the Wechsler Intelligence Scale Scale cognitive abilities of learning disabled students in Ahwaz Woodcock johnson)) is shifted

Table 1 shows the plot of the different subtests of the Wechsler intelligence scale approach in learning disability cases have been reported.

Table 1

**Methods of subtests of the Wisc-r intelligence scale plot of the difference in sample learning disabilities**

level of significance	rate The critical difference	rate The critical difference	rate Experimental differences	Subtests
0/05	3/84	2/97	3/70	Similarities
0/01	3/83	2/96	4/57	Vocabulary
0/01	3/84	2/97	5/14	Understand
0/01	3/83	2/96	4/25	Information

0/01	3/60	2/86	4/84	Reasoning word
-	3/87	2/88	1/84	Designed by cubic
0/05	3/89	2/87	3/45	Concepts image
-	3/78	2/97	2/80	Matrix Reasoning
-	3/79	2/96	2/60	Complete picture
0/05	3/69	2/89	3	Capacity number
0/01	3/89	2/89	6/12	Sequence number - Letter
-	3/88	2/88	2/40	Calculation
-	3/79	2/96	2/85	Encryption
0/05	3/78	2/97	3/35	Symbol Detection
-	3/76	2/87	2/63	Deletion

According to the statistical analysis method subtest of the Wisc-r intelligence scale plot differences, we found no significant differences between similar elements, vocabulary, understanding, intelligence, reasoning, the word, concepts picture capacity number, sequence number - word and symbol detection with scores of learning disabled students there.

Table 2

way subtest of the Wisc-r intelligence scale plot of the differences in samples of learning disabled

Diagnostic validity	CI	Theoretical mean	Experimental mean	Subtests
Yes	More than 2 standard deviations	100	74/33	Verbal understanding
no	More than 1 standard deviations	100	83/60	Perceptual Reasoning
Yes	More	100	74/03	Working

	than 2 standard deviations			Memory
no	Less than 1 standard deviation	100	84/71	Processing speed
Yes	More than 2 standard deviations	100	73/68	Scale of the entire

According to statistical analysis using CI axes can be combined Wisc-r intelligence scale found no significant difference between verbal comprehension (33/74), working memory (74/03) and scale (73/68) of students with disabilities There are learning the difference between experimental and theoretical mean they are beyond one standard deviation is, therefore, verbal comprehension, working memory, and scale in the diagnosis of learning disabled students recognize their validity, and the difference between experimental and theoretical mean Perceptual Reasoning and the processing speed is less than one standard deviation, so the diagnosis of learning disabled students are not diagnostic validity.

**Discussion and conclusion:**

Do have complete copies of the fourth version of the Wechsler Intelligence Scale for learning disabled students of Ahwaz has validity? In order to test the above question, using subtests of the Wechsler intelligence scale plot of the differences, it was found that no significant differences among Similarities, vocabulary, understanding, intelligence, reasoning, words, concepts, images, capacity, number, sequence number - the letter the scale and symbol detection in the diagnosis of learning disabled students recognize their validity.

The CI method using a combination of axes Wechsler intelligence scale indicated that the significant difference between verbal comprehension (74/33), working memory (74/03) and scale (73/68) of the students have learning disabilities the differences between experimental and

theoretical mean and one standard deviation is beyond the comprehension, verbal working memory, and scale with validity in the diagnosis of learning disabled students are

Finally, according to analysis based method combined with a learning disability Wechsler intelligence scale for children (the dominant cognitive processing speed and working memory and the ability to score consisted of two public is composed of both cognitive scores and reasoning THEOLOGICAL understanding). Results showed that the combination rate dominance-based differences in cognitive abilities of learning disabled students is less than 8. Hence, it is a mixture of axis scale Wechsler intelligence children diagnosed learning disabled students have no validity.

Do third-scale version of the cognitive abilities of learning disabled students in Ahwaz Woodcock johnson has validity? In order to test the above question, using a plot of the different sub-tests of cognitive abilities, it was found that the difference between comprehension tests of verbal learning, visual - auditory, visual and word incomplete adapt the scale for the diagnosis of students with learning disabilities have validity.

Also, the method of CI tests of cognitive ability Woodcock johnson indicated that the significant difference between the tests of verbal comprehension, visual learning - auditory, visual adaptation and learning disabled students are imperfect words, and the difference between experimental no mean test of verbal comprehension tests and learning - visual, auditory and visual adaptation beyond one standard deviation of the test words are flawed beyond two standard deviations. Therefore, the tests in the diagnosis of learning disabled students recognize their validity.

## Resources

### Persian sources:

1. No, Hassan, Kakavand, A. (2012) Impaired learning, From Theory to Practice, Seventh Edition, Tehran, Arasbaran.
2. Aylvard, Elizabeth. H., Brown, Frank. R. (1996) Identification and organization of learning disabilities, t KhankhanyZadeh, H. and Bagheri, Sahar (2011) Verbal learning their effectiveness in improving the social adjustment of students with learning disabilities, learning disabilities Journal, Volume II, Number 1, pp. 52-43.
3. Daniel Pink, Halahan, Juno, Lloyd, James M. Kauffman, Margaret Chi, Weiss, Elizabeth A., Martinez (2005), learning disorders, Foundations, Characteristics and Effective Teaching, Translated by Hamid Alizadeh, G. alamdaruHemmati, S. RezaeiDehnavi star Shojaei (2012), third edition, Tehran, publishing Arasbaran.
4. ranslated by R. Brother (1998), first edition, Tehran, Special Education Organization.
5. BoogarRahimian, Ishaq, H. M. (2012) Sensitivity, specificity, and cut the Wechsler Intelligence Scale for Children-Revised, Journal of Psychiatry and Clinical Psychology; 18 (3): 195 -201
6. Karami, A. (2009) Understanding the psychological test Test, Fifth Edition, Tehran, capital of psychometric publication.
7. SeifNaraghi, M., Naderi, E. (1999) Methods of assessment and diagnosis of mentally retarded children, children with intellectual disability Total International Conference, University of Welfare and Rehabilitation Sciences.
8. SeifNaraghi, M., Naderi, E. (2010) Specific deficits in learning (how to recognize and rehabilitation), second edition, Tehran, Nshrarsbaran.
9. Sharifi, Hassan Pasha (2003) Theory and Application Intelligence and Personality Tests, Third Edition, Tehran, speaking publications.
10. Sharifi, Hassan Pasha (2005) psychometric principles and Rvanazmayy, Tenth Edition, Tehran, growth.
11. Sadeghi, A., Rabie, M., Abedi, MR, Wechsler Intelligence Scale for Children validation and validation of the fourth edition (2011) Journal of developmental psychology, psychologists, Iranian, Issue 28.

12. Fryar, A., shinning, F (2000) learning disabilities theory, diagnosis and teaching strategies, Fourth Edition, Tehran-based Press.
13. Kamkari, Kambiz; Shkrzadh, SH; zealot Ali, Azizi, M. (2012) Diagnostic validity of the new version Intelligence Laboratory Tehran - Stanford - Binet in line with learning disabilities, Regional Conference on Child and Adolescent Psychology, Islamic Azad University, Kermanshah, Group Psychology.
14. Kakavand, A. (2006), learning disabilities, diagnosis and teaching strategies, second edition, Karaj, a proud publication.
15. Prosperity, Kambiz (2011) Practical Guide to the new version Intelligence Laboratory Tehran - Stanford Binet, Tehran, first edition, publication of school came.
16. Gorman, Jean Cheng (2002), emotional disorders and learning disabilities in elementary classes, translation and Nasser Mohammed NarimaniDgrmandrvq (2002), first edition, Ardabil, Nick student publications.
17. Ganji, H. (2010) Psychological tests, theoretical and practical, Twelfth Edition, Tehran, savalan publication.
18. Lerner, Janet W. (1997) Learning disabilities; Theories, diagnosis and teaching strategies, translated by E. Knowledge (1390) second edition, Tehran, capital of martyr Beheshti University Press.
19. Westwood, Peter (1997) Education of children with special needs, translation Makvandi Hussein Shah Rukh and Farah Shylandry (2002) first edition, Tehran, emissions growth.
20. Wechsler, David (1974) Wechsler Intelligence Scale for Children Revised, adaptation and standardization TV Shahim (2011) Sixth Edition, Shiraz, Shiraz University Publication Center.
21. H., Haider Ali (1996) provided a measure of Psychological and Educational Technologies Test, Ninth Edition, Tehran, pious publication.
22. Arthure, A. R (2003) . The emotional lives of people with learning disability. Journal of learning Disabilities, 31, 31-25.
23. Farmer, T. W. (2000). Misconceptions of peer rejection and problem behavior: Understanding aggression in students with mild disabilities. Journal of Remedial and Special Education, 21, 208-194.

24. Fletcher, J. M., Lyon, G. R, Fuchs, L. S., & Barnes, M. A. (2007). Learning disabilities: From identification to intervention. NY: Guilford.
25. Flynn, J.M., Dearing, W., Goldstein , M. and M OHAMMAD , H.R.(1992) ‘Electro physiological correlates of dyslexia subtypes , Journal of learning disabilities 25 , 41-2:133.
26. Frazier, T. W, Youngstown, E. A, Glutting, J. J, & Watkins, M. W. (2007). ADHD and achievement: Meta-analysis of the child, adolescent, and adult literatures and a concomitant study with college students. Journal of Learning Disabilities, 40, 49–65.

#### English Resource

27. Arthure, A. R (2003) . The emotional lives of people with learning disability. Journal of learning Disabilities, 31, 31-25.
28. Farmer, T. W. (2000). Misconceptions of peer rejection and problem behavior: Understanding aggression in students with mild disabilities. Journal of Remedial and Special Education, 21, 208-194.
29. Fletcher, J. M., Lyon, G. R, Fuchs, L. S., & Barnes, M. A. (2007). Learning disabilities: From identification to intervention. NY: Guilford.
30. Flynn, J.M., Dearing, W., Goldstein , M. and M OHAMMAD , H.R.(1992) ‘Electro physiological correlates of dyslexia subtypes , Journal of learning disabilities 25 , 41-2:133.
31. Frazier, T. W, Youngstown, E. A, Glutting, J. J, & Watkins, M. W. (2007). ADHD and achievement: Meta-analysis of the child, adolescent, and adult literatures and a concomitant study with college students. Journal of Learning Disabilities, 40, 49–65.
32. Freilich, R., &Shechtman, Z. (2010). The contribution of art therapy to the social emotional and academic Adjustment of children with learning disabilities. Journal of the Arts in Psychotherapy, 37, 105-97
33. McKinney, j .d.(1988)•Research on conceptually and empirically derived sub-types of specific learning disability ‘ in M.C Wang , M . Reynold , and H.J wal berg (eds) Hand book of special education vol2 , oxford : Pergamum.
34. Sideridis , G. D. (2006). Understanding low achievement and depression in children with learning disabilities: A goal orientation approach. Journal of International Review of Research in Mental Retardation, 31, 203-163.
35. Westwood,P.S.(1979) ‘planning units of work for less able students , in catering for children with special needs in the primary school , Adelaide : Education Department of south Australia.