A comparison of self perception of children with non-verbal learning disabilities (NId) and verbal learning disabilities (VLD)

Mohammad Reza Zarbakhsh^{1*,} Homayoon Haroon Rashidi²

¹Department of Psychology, Tonekabon Branch, Islamic Azad University, Tonekabon, Iran

²Department of Psychology, Dezful Branch, Islamic Azad University, Dezful, Iran

Corresponding author: Mohammad Reza Zarbakhsh, Department of Psychology, Tonekabon Branch, Islamic Azad University, Tonekabon, Iran E-mail address: rzarbakhsh@yahoo.com

Abstract

The main purpose of this study was to compare self perception of children with nonverbal learning disabilities (NLD) and those with verbal learning disabilities (VLD) .The sample of study was selected from a group of students referred to the Learning Disability Center in Shiraz. Two different groups of students with NLD and VLD were selected based on their scores on the Pupil Rating Scale: Screening for learning disabilities (Mykelbust, 1971) and the verbal – performance IQ difference on the (WISC-R). Sixty four students 6 to 11 years old were selected, 30 students were diagnosed as having nonverbal learning disabilities and 34 students were diagnosed as having verbal learning disabilities. In order to analyize data two-way ANOVA used. results showed that student nonverbal learning disabilities scored significantly higher on in self perception than student nverbal learning disabilities. However, no significant differences were found on sex of participants . The results of research were discussed, and research limitations and suggestions were presented.

Keywords: Self -Perception, Learning Disabilities, Verbal, Nonverbal.

1.Introduction

Children with learning disabilities are a group of exceptional children with normal appearance and they have normal IQ and sometimes higher. based on Diagnostic and Statistic Manual of Mental Disorder- Revised (DSM-IV-R) (Nikkho and Avadis Yans,2002). About 2 to 10 percent of children afflicted to this disorder and this disorder in boys are usually threefold girls. Learning disabilities in the Diagnostic and Statistical Manual of Mental Disorderes has been suggested such as classification and diagnostic criteria for disabilities in reading, math and written expression. In this defines three major criteria for diagnosis of disabilities of reading, math and written expression are as follows : A) the person's ability or skill in each of the areas of reading, math and written expression are as follows : A) the person's ability or skill in each of the areas of reading, math and written expression significantly or skills in reading, math and written expression significantly . C) If there is a sensory defect, learning difficulties should be in addition to those usually seen associated with its defect. Fit Halis is divided learning disabilities into two major categories include verbal learning disabilities and nonverbal learning disabilities, verbal learning disability usually occurs at symbolism and thus affect on formation of concepts. Symbolism is ability to communicate or return the beliefs of audio-visual to significant symbols. Symbolism encompasses all of acts necessary for reading, writing, spelling, counting and talking to successfully, the formation of concepts is considered the most important form of intelligence activities and is related to the ability to classify, to make the abstract, to critical analysis, to generalize and to develop (Halis translate to Persian Monshi Tosi, 1987).

This fact that left hemisphere of the brain is devoted to verbal information processing and have monitored on production of speech, has been accepted by scholars, but the right hemisphere of the brain is devoted to spatial-visual information processing and also for other types of information processing, has been less acceptable; because for years the left hemisphere were considered as the dominant hemisphere for all or more processing the different types of information. So enough studies was not performed on right hemisphere functions and the important role of this hemisphere in the recognition of everyday problems and emotional functioning (emotional) and social (Thompson, 1996; Heller, 1997; Barce, 1998).

Mykelbust is one of first researcher who has described characteristics of children with disabilities of visual-spatial processing (Mykelbust,1978;Molenar-Klumper,2002; Little,2002; Gatz, Goldstein and Bires 2002; Russell,2004). This children later extensively were studied by Rourke and colleagues - that this syndrome called nonverbal learning disabilities (NLD)(Dinklag, 2001 Molenar-Klumper,2002;Tanguay2001,2003). Syndrome of nonverbal learning disabilities (NLD), including a number of potentially disabling symptoms that Rourke (1995) has divided them to three major categories include: Nuropsychological deficits, Aacademic deficits and Social-emotional/adaptation deficits (quoting from Roman,1998). Nuropsychological deficits is including problems in visual and tactile perception, psychomotor coordination - motor, visual and tactile attention, nonverbal memory, reasoning, executive functions, and specific problems in aspects of language and speech. Aacademic deficits are included problems in the following fields: Deficiencies in math calculations, math reasoning, reading comprehension and understanding of some subjects and aspects of written language and handwriting. Social deficits is including problems in social perception and social interaction. Children with this disability seems to be at high risk for becoming infected with various forms (Rourke, Rourke, Young & Leenaars,1989). Diagnosis of syndrome in nonverbal learning disabilities has consider as an independent diagnosis of verbal learning disabilities in this latter case, attention experts in this field, including (Rourke, 1988-19989; Fudge, 1997;



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Maxwel,1998; Frankenberger, 2002 and et al). Some of evolution theories about create of this disability have emphasize the role of right hemisphere (Goldenberg and kasta,1981; Weintraub and Mesulam, 1983; Voeller,1986; Tranel and et al,1987;Ladel and Rasmosen,2005), In contrast some other have emphasize the role of white body system under cortical gray (Cerebral Cortex)(quoting from Tanguay,2001;Vodes and et al,2002). These two views are more complement each other until each other violate, somewhat both view help in predicting correct of this syndrome in different situations (Rourke,1995). One of the features that are easily observed in children with NLD is its verbal IQ significantly higher than their practical IQ in IQ scale (Rourke,ditroch and yung,1973;Johnson,1987; Weintraub and Mesulam,1983). This finding indicate significant difference between verbal abilities (cognitive abilities space - visual) in these children. Difference about 10 points or more indicates a significant difference between verbal IQ and practical (Dimitrovsky and et al,1998; McDonough-Ryan and et al,2002).

In this regard Rourke (1989) Furest, Fisk & Rourk,(1990) in the study of children with nonverbal learning disabilities reported using the Wechsler Intelligence Scale that there is difference more than 10 score between verbal IQ and practicality of these children. In this relation, Humphries, Worling,pites (2004) in study with examination a group capabilities of children with nonverbal learning disabilities and children with verbal disabilities received that there is significant difference between verbal IQ and practical IQ in two group with verbal and nonverbal learning disabilities in Wechsler Intelligence Scale for children. On other research on this field, Humphries, Krekwich, Snider(1996),with study verbal IQ and practical IQ with nonverbal disabilities in Wechsler Intelligence Scale for children have reported that there is significant difference between verbal IQ To benefit of verbal IQ in Wechsler Intelligence Scale. In this relation Haroon Rashidi (2007) have found with study and compared the performance of 52 subjects boys and girls in 6 to 11 years old with nonverbal learning disabilities (23 person) and with verbal learning disabilities (29 person) in Wechsler Intelligence Scale for children in Shiraz that there is significant differences on subtests information , similarities, terms and account between two group with nonverbal learning disabilities and verbal learning disabilities.

In all cases the mean scores groups with nonverbal learning disabilities is higher than mean scores on verbal learning disabilities, except in the field of memory figure and perception.but in sub-test account contrast to other sub-tests means scores group with nonverbal learning disabilities is lower than means scores group with verbal learning disabilities. Also they founded that there is difference in all of practical sub-tests in Wechsler Intelligence Scale-Revised to companent adjusted for symptoms in both groups with verbal learning disabilities and non-verbal learning disabilities, So in all subtests scores groups with nonverbal learning disabilities is less than the mean scores groups with verbal learning disabilities (Haroon Rashidi & Shahim, 2007; Haroon Rashidi, 2010). NLD children usually have a good performance in received and express words. The children show disabilities in some aspects of speech and language. Also this children show problems in prosody and amply showing song's emotions. problems in prosody is include uniformity of speech with sound damping. Because these people in social environments excessive talk, peers know them as peoples who excessive talk about a boring issues (Vacca, 2001; Molenar-Klumper, 2002; Gutz et al, 2002; Russell,2004) weakness in perception, understanding, organizing and disrupting the structure of the story, despite having good grammar, words and other characteristics of these children. Remember story of a story is normal but they forget the main point of story. Also rhythm, music and tone of voice is often difficult (Thompson,1997; Chow & Skuy, 1999).

Problems of visual perception, visual processing and cognitive abilities of the visual-space is the most obvious characteristics of children with NLD (Harnadek & Rourke, 1994). This children show the high insufficiency in the difficult tasks that have need to visual processing and visual-space ability (Bender & Golden1990; Fudge, 1997; Dinklag, 2001). Also these children show some problems in the field of motions and fine motor skills. Difficulties in the total relations with component, especially in the embodiment, have images of the total. Difficulties in drawing or imitating is observed in many of them. Furthermore, especially in the early stages of their handwriting is often weak. Some evidence suggests that children with NLD have learning capable in repeated of motor skills with repeated practice in many times, although they may initially have problems and weaknesses in learning these skills. Handwriting, simple forms of copying, cutting, painting, and drawing shapes are good example from delicate motor skills that improve with age increasingly (Aylward, 2002; Marti, 2004; Forrest, 2005).

Generally, several studies has been done in field of exceptional children and children with verbal and nonverbal learning disabilities in particular and further studies is trying to solve children's issues. Generally, cognitive abilities and characteristics of children and adolescents and children with special needs, such as verbal and nonverbal learning disabilities and how students perceive themselves and others to help teachers and parents for action resolve their problems and prevent academic failure that is great calamity of educational system. Determine the strengths and weaknesses points of children with learning disorders of verbal and nonverbal is initial conditions due to individual differences and can guide for future curriculum children. Obviously educational interventions and treatment is requires the evaluation of behavior of these children and recognition of their weaknesses, abilities is an important step in providing educational opportunities for this group of children. The findings of this research will help us that cognitive abilities in children and adolescents with disorders of verbal and nonverbal learning to training programs that its target is different needs of students with verbal and nonverbal learning disabilities and the attention focused on this point that students with verbal and non verbal learning disabilities have with different strengths and weaknesses points and in regard to this plan, it will lead to more efficiency. On the other hand , in every society are a group of students with verbal and nonverbal learning disorders and maybe they have imagination and perception of their own apart from normal people. Therefore, knowledge of how these people perceive themselves and others, both for themselves and for people who are somehow associated with them is



important. According to above mentioned issues, investigation and comparison to their perception of how students with verbal and nonverbal learning disabilities appear to be necessary, thus this study was conducted In order to this issue.

2. Research Questions

Is there difference between self-perception and its dimentions according to gender (female and male) and type of students with verbal and nonverbal learning disability?

3. Research Method

Present study is Causal - Comparative that it is done as field.

3.1. Statistical Society and Sample

Statistical society of present study was including all of male and female students in primary school with learning difficulties studying in learning disabilities centers of exceptional organization Shiraz in the academic year 2009-2010. Due to the low number of students with learning problems have referred to learning disabilities centers of exceptional organization in city of Shiraz in the academic year 2009-2010, all students were assessed as sample. This number were included 132 students (48 female and 84 males) from three grade third to fifth that was studying 45 students (16 female and 28 male) in third class; 51 students (18 female and 33 male) in fourth class and 37 students (14 female and 23 male) in fifth class. Finally, based on criteria specified that is described in data collection method , 64 subjects as available studied as examples of research.

3.2. Research Tools

In the present study to collect data was used from the Wechsler Intelligence Scale for Children (WISC), rating scale, students, early diagnosis of children with learning disabilities and perceived competence scale.

3.2.1 The Wechsler Intelligence Scale for Children (WISC):

The Wechsler Intelligence Scale for Children Revised (WISC-R) is translated ,adapted and standardized by Shahim (2006) in order to measure intelligence for children 6 to 13 years for used in shiraz. Test – Retest reliability 0/44 to 0/94 (Middle 0/73) and its Split – half reliability 0/42 to 0/98 (Middle 0/69) has been reported. Concurrent validity by using correlation with functional section scores the Wechsler Preschool Scale (WPS) 0/74 (total 0/85). The relationship between IQ with age and economic-social categories, and average as the criterion validity of a significant scale has been reported. The correlation coefficient between IQ of verbal, practical, and total is 0/84,0/76,0/80 respectively.

3.2.2 The pupil Rating Scale:Screening for learning disabilities

This scale has 24 questions, by Michael Bassett in 1971, to identify students with learning disabilities were prepared and revised in 1981. By Michael Bassett in 1981, by this measure examined to compare children with learning disabilities and children without learning disabilities and thus concluded that children with learning disabilities and children without learning disabilities have significantly different in total mean scale each other at the level (p<0/001). In this scale are rating for students by teachers in the five behavioral characteristics following: auditory coperhension(include 4 questions), spoken language(include 5 questions) Orientation(include 4 questions) Motor Coordination(include 3 questions) and Personal-Social behavior (include 8 questions). Scale of this score is based on a scale of five options that options 1 and 2 is lower than average, option 3 average, and options 4 and 5 show higher than average. This scale provides three scores: verbal, non verbal (practical) and the total. Verbal score obtained the sum scores parts of auditory coperhension and spoken language , non verbal obtained the sum scores parts Orientation, Motor Coordination, Personal-Social behavior and total score sum of verbal and nonverbal scores. Thus by using this scale were assessed verbal and nonverbal abilities of students. The pupil Rating Scale: early diagnosis of children with learning disabilities, Michael Bassett, by Ahadi (1994), translated and reliability in a group of learning disabilities by using Cronbach's alpha coefficient has been reported 0/99 and its efficacy in the diagnosis of learning disabilities is confirmed from the normal group. In the present study was used this scale to evaluate teachers for the capabilities of verbal and nonverbal students.

3.2.3 The scale of perceived competence

In this study to measure students' self-perception was used a questionnaire consisting of 48 questions based on self-perception profile of adolescents Harter (1980) and Scale of perceived competence from Harter (1982) that has been prepared by Saif, Bashash and Latifian (2004). This scale evaluate five dimentions of self-perception include the perception of cognitive competence with 8 question, perception of sportive competence with 9 questions, perception of social competence with 10 question, behavioral control with 8 question and general self worth dimension with 13 questions. Respond to items is encoded by five-part likert scores of much agree (score 5) to much disagree (score 1). Reliability of this tool in Saif `study and et al (2004) by method of Cronbach's alpha is reported between 0/71 to 0/85. Also structural validity of this scale has been obtaining through factor analysis with varimax rotation. The results of scale analysis showed that above five factors in total will determine 0/46 the variance of total scores in scale.

3.2.4. Data collection methods

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In order to assess intelligence of students the revised Wechsler Scale for Children (Shahim, 2006) were assessed individually all of students in during time six month before date from this study by specialists in centers of learning disabilities were not assessed exceptional Shiraz city and was considered for others the last scores of intelligence evaluation with the revised Wechsler intelligence scale for children that was conducted by specialists in psychometric centers. This information was extracted from the records of students. Selection of final sample in this study was conducted during several step of evaluation and assessment of students, this way that after implementation of the revised Wechsler Intelligence Scale for children, first, those who have a difference of 10 scores and more between verbal IQ and the practical (Rourke,1989; Rourke & Harnadek,fisk an et al,1990; Dimitrovsky an et al,1998;Cornoldi and et al, 1999; Kaufman,2001; Humphries and et al ,2004) is selected as sample and others were eliminated. Range difference between verbal IQ and practical in sample of this study have been changed ranged between 10 and 33 score IQ. All children were located at least in one of verbal IQ, practical and or total in the normal IQ range (based on Kaufman,1975). IQ range of total groups has been changing in a range of 88 to 130. At this stage the total number was 82.

Also, to further ensure compared to sampling, grading scale for students: primary diagnosis of children with learning disabilities, Michael Bassett (1971) to assess verbal and nonverbal abilities of students were provided to teachers in ordinary schools. Before implementing above measures, first necessary explanations about importance of the topic was offered for secure the cooperation of teachers and if teachers during completed the scale in understanding of expressions have the problem, would provide the necessary explanations. Thus by using this scale were assessed verbal and nonverbal abilities students and consider scores of the verbal and practical sub-test Michael Bassett were not equal, students' scores became to standard scores with mean 50 and standard deviation of 10 and then difference between verbal and nonverbal scores were calculated for each student.

After preliminary tests and collect the necessary information, the students with significant differences (10 score or more) in verbal and practical IQ of the Revised Wechsler Intelligence Scale for children and based on studies (Rourke,1989; Rourke & Harnadek,fisk an et al,1990; Dimitrovsky an et al,1998;Cornoldi and et al, 1999; Kaufman,2001; Humphries and et al ,2004) were known with learning disabilities and in the rating scale of students: primary diagnosis of children with learning disabilities, Michael Bassett with advantages in verbal or practical ability were chosen as final sample. 64 students have above characteristics that based on following characteristics is divided two group with nonverbal learning disabilities and verbal learning disabilities in children:

1. First group was included children with nonverbal learning disabilities that were selected based on following two criteria: A) Children that in Wechsler Intelligence revised Scale for children were verbal IQ with obvious advantage (more than 10 scores) compared to practical IQ (nonverbal). B) The pupil Rating Scale: Primary diagnosis of children with learning disabilities, Michael Bassett have more scores in verbal section compared to nonverbal (practical) scores. From 64 sample, 30 student have above characteristics.

2. Second group was included children with verbal learning disabilities that were selected based on following two criteria: A) children that In Wechsler Intelligence revised Scale for children were practical IQ with obvious advantage (more than 10 scores) compared to verbal IQ. B) The pupil Rating Scale: Primary diagnosis of children with learning disabilities, Michael Bassett have more scores in nonverbal (practical) section compared to verbal scores. From 64 sample, 34student have above Characteristics. Thus final sample of this study consisted 64 students with learning disabilities based on gender and age (28 females) and (36 male) from 8 to 11 years old.

Table 1: Mean and standard deviation of self-perception and its dimensions based on gender and subject group									
Group	Cognitive		Sportive	Social	Social Behavioral		Self perception		
iverbal	male	$\overline{X} = 20.21$	\overline{X} =20.73	<i>X̄</i> =23.15	<i>X</i> =24.84	\overline{X} =22.10	$\overline{X} = 114.47$		
ities		SD=2.89	SD=2.78	SD=4.96	SD=4.92	SD=4.31	SD=16.18		
With non	Female	<i>X</i> =20.18	\overline{X} =21.18	\overline{X} =22.54	$\overline{X} = 21.45$	\overline{X} =26.36	$\overline{X} = 111.72$		
disabil		SD=2.44	SD=2.60	SD=4.98	SD=4.71	SD=5.22	SD=16.70		
verbal	Male	$\overline{X} = 26.95$	$\overline{X} = 25.81$	$\overline{X} = 28.54$	$\overline{X} = 27.81$	$\overline{X} = 28.04$	$\overline{X} = 137.18$		
ilities		SD=4.21	SD=4.32	SD=5.30	SD=6.86	SD=4.81	SD=21.86		
With	Fema	\overline{X} =26.50	$\overline{X} = 26.50$	$\overline{X} = 27.83$	$\overline{X} = 28.91$	$\overline{X} = 29.33$	$\overline{X} = 139.08$		
disab	le	SD=4.33	SD=5.09	SD=5.93	SD=8.21	SD=4.75	SD=24.17		

4. Results and Findings

Research question: is there difference between self-perception and its dimentions according to gender (female and male) and type of students (with verbal and nonverbal learning disabilities). To investigate this question was used two-way analysis of variance. Descriptive and inferential results from this study are presented in Table No. (1to 7). The findings contained in (Table.1) show that the mean scores for males and females is very close to each other in self-perception scale and its dimentions in group



with verbal learning disabilities. In other words, the two groups of males and females have almost the same performance in total score of self-perception scale and its dimensions.also The findings show that the mean scores of group with verbal disabilities in self-perception scale and its dimensions is higher than groups with non-verbal disabilities.

Table. 2: Result of two-way analysis of variance gender and type of subjects in general performance of subjects in self-perception							
scale							
Source of variance	SS	DF	MS	F	Sig		
Gender	0.289	1	0.289	0.007	0.936		
Type of subjects	920.66	1	920.66	23.02	0.001		
Gender *Type of subjects	19.557	1	19.557	0.489	0.658		
Error	2399.44	60	39.994				
Total	38530.00	64					

Result of Table. 2 shows that in self-perception scale, there isn't significant difference between male and female subjects. Furthermore, the above table shows that the performance of subjects with verbal and nonverbal learning disabilities have significant difference together (P<0/001). The mean comparisons show that students with verbal learning disabilities have achieved higher scores in this field. Also was observed that the interaction between two variables of gender and type of subjects (with verbal and nonverbal learning disabilities) are not significant.

Table 3: Result of two-way analysis of variance gender and type of subjects in perception of cognitive competence dimension of							
self-perception scale							
Source of variance SS DF MS F Sig							
Gender	0.858	1	0.858	0.065	0.800		
Type of subjects	626.52	1	626.52	47.53	0.001		
Gender *Type of subjects	0.666	1	0.666	0.051	0.823		
Error	790.74	60	13.17				
Total 47433.00 64							

Results of Table.3 shows that in the perception of cognitive competence dimension, there isn't significant difference between male and female subjects. Furthermore, the above table shows that the performance of subjects with verbal and nonverbal learning disabilities have significant difference together (P<0/001). The mean comparisons show that students with verbal learning disabilities have achieved higher scores in this field. Also was observed that the interaction between two variables of gender and type of subjects (with verbal and nonverbal learning disabilities) are not significant.

Table 4: Result of two-way analysis of variance gender and type of subjects in the perception of sportive competence dimension of self-perception scale								
Source of variance SS DF MS F Sig								
Gender	4.66	1	4.66	0.316	0.576			
Type of subjects	397.13	1	397.13	26.90	0.001			
Gender *Type of subjects	0.206	1	0.206	0.014	0.906			
Error	885.59	60	14.76					
Total	37085.00	64						

Results of Table. 4 shows that in The perception of sportive competence dimension, there isn't significant difference between male and female subjects. Furthermore, the above table shows that the performance of subjects with verbal and nonverbal learning disabilities have significant difference together (P<0/001). The mean comparisons show that students with verbal learning disabilities have achieved higher scores in this field. Also was observed that the interaction between two variables of gender and type of subjects (with verbal and nonverbal learning disabilities) are not significant.

Table 5: result of two-way analysis of variance gender and type of subjects in the perception of social competence dimension of							
self-perception scale							
Source of variance SS DF MS F Sig							
Gender	14.81	1	14.81	0.534	0.468		
Type of subjects	366.56	1	366.56	13.21	0.001		
Gender *Type of subjects	1.25	1	1.25	0.045	0.832		
Error	1664.4	60	27.74				
Total	4527.00	64					



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Results of Table. 5 shows that in the perception of social competence dimension, there isn't significant difference between male and female subjects. Furthermore, the above table shows that the performance of subjects with verbal and nonverbal learning disabilities have significant difference together (P<0/001). The mean comparisons show that students with verbal learning disabilities have achieved higher scores in this field. Also was observed that the interaction between two variables of gender and type of subjects (with verbal and nonverbal learning disabilities) are not significant.

Table 6: result of two-way analysis of variance gender and type of subjects in behavioral control dimension of self-perception							
	scale						
Source of variance	SS	DF	MS	F	Sig		
Gender	0.736	1	0.736	0.019	0.890		
Type of subjects	637.057	1	637.057	16.69	0.001		
Gender *Type of subjects	11.23	1	11.23	0.294	0.589		
Error	2290.70	60	38.17				
Total	4369.00	64					

Results of Table 6 shows that in behavioral control dimension, there isn't significant difference between male and female subjects. Furthermore, the above table shows that the performance of subjects with verbal and nonverbal learning disabilities have significant difference together (P<0/001). The mean comparisons show that students with verbal learning disabilities have achieved higher scores in this field. Also was observed that the interaction between two variables of gender and type of subjects (with verbal and nonverbal learning disabilities) are not significant.

Table 7: Result of two-way analysis of variance gender and type of subjects in General Self Worth dimension of self-perception							
scale							
Source of variance	SS	DF	MS	F	Sig		
Gender	0.019	1	0.019	0.007	0.978		
Type of subjects	43.35	1	43.35	17.026	0.001		
Gender *Type of subjects	2.309	1	2.309	0.907	0.345		
Error	152.79	60	2.546				
Total	5124.00	64					

Results of Table 7 shows that in the perception of general self worth dimension, there isn't significant difference between male and female subjects. Furthermore, the above table shows that the performance of subjects with verbal and nonverbal learning disabilities have significant difference together (P<0/001). The mean comparisons show that students with verbal learning disabilities have achieved higher scores in this field. Also was observed that the interaction between two variables of gender and type of subjects (with verbal and nonverbal learning disabilities) are not significant.

5. Discussion and Conclusion

This study has examined the differences between self-perception and its dimensions according to gender (female and male) and type of students (verbal and nonverbal learning disabilities). Results showed that there isn't significant difference between groups of males and females in the scale of social perception and its dimensions, This finding is not far from expectation and is consistent with the findings Jenkins and Asitengton (1996) and Sperling et al (2000). Mentioned researchers found in their research that None of abilities of mind theory are not dedicated to gender and generally there are no significant differences between two genders. In addition should be mentioned that today there isn't many gender differences whereas has been reported in previous decades. In general research shows that gender differences have decreased in recent years and it cause is more in social change, socialization process, change in cultural contexts and create equal opportunities for both genders (Lefrancois,1996). Moreover, the results indicate that variable type of subjects (with verbal and nonverbal learning disabilities) is independent from the gender factor in general performance on self-perception scale and all of its dimensions, The mean comparisons show that students with verbal disabilities self-perception scale in and all of its dimensions have achieved higher scores. in other words, There are significant differences in favor of verbal group between subjects with verbal and nonverbal learning disabilities in general performance and performance in each of self-perception scale dimensional. This finding is consistent with study that experess; Children with nonverbal learning disabilities show delay in the perception of themselves (Russell and et al, 1998; Patterson and Siegel, 1995; 2005; Loundi, 2007). On the other hand results of group impact, likely reflecting this fact that students with nonverbal learning disabilities can not have communication and social interaction with individuals in the environment, hence show significantly lower performance due to their problem.

The findings of this research help us in recognition abilities in children with verbal and nonverbal learning disabilities For educational programs that its target is to meet the different needs of students with verbal and nonverbal learning disabilities and the attention focused on this point that students with verbal and nonverbal learning disabilities have different strengths and weaknesses and attention to this issue in planning educational programs, leading to more efficient. Also by the mass media is tried that



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individuals aware with progress and achievements of people with verbal and nonverbal learning disabilities and conditions provide in order to develop relations and interaction of this individuals with normal group.

Overall, the findings of this study show that children with non-verbal learning disabilities is faced more problems in selfperception. Considering the importance self-perception, educational and therapeutic intervention programs need for grow and develop mentioned skills in these children is more apparent. because we grow learners with correct planning, that they have more attention to thoughts, feelings and emotions of their and others, to have Sympathy and empathy with others and to have actively participate in social interactions. First limitations in most questionnaire research including this study, our assessment is based on a report that individuals provide the status of questioned. In fact individual is intermediate between researcher and fact that there is possibility of information diversion.other limitations in this study is including unique sample to centers of specific learning disabilities of exceptional organizations in Shiraz, small samples due to the limited number of centers of specific learning disabilities of exceptional organizations in Shiraz and lack an standard test of academic achievement in the field of reading for children with verbal disabilities. Doing similar research in other groups of exceptional children, including deaf children, gifted, more active, ... and compare them with normal children, investigate of self-perception in different age groups and different educational levels and in order to extension of the results, and access research in other age groups and other educational levels and their comparison together and comparison other characteristics of children with nonverbal learning disabilities Such as memory, social skills, self-concept, etc. for future research are suggested.

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