

## **Evaluation of Receptive Language Skills among Students with down syndrome in the City of Najran**

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**Abstract:** *This study aims at evaluating the skills of the receptive language of the students with Down syndrome in the city of Najran. The sample of the study consisted of 16 students, (9) in the elementary stage, (7) in the intermediate stage. The scale of the University of Michigan of language skills for the mentally disabled (after receptive language) was used. The results showed that the average score for students who have receptive language skills was (37%) at a low estimate, as the study showed the existence of differences between students with Down syndrome in the classroom variable (elementary, intermediate) in favor of the middle stage.*

**Key Words:** *receptive language, Down syndrome*

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### **I. Introduction**

Language is an essential means of social communication, particularly in the self-expression and understanding of others, and an important means of mental, cognitive and emotional development. The importance of language acquisition for children comes from being a vital and important factor to the process of interaction and communication with others, and by acquiring it, great change happens in their world in light of the progress they show when talking with others around them. The language with both its expressive and receptive phases is a means to express our thoughts and feelings.

Language, which is known as "a formal system of communication that includes symbols, is characterized by systematic order, control and adherence to the rules needed to compile these symbols and rules that help us to communicate (Harley, 2001). The lingual development means "the child's ability to track normal plan and sequence of the stages of language acquisition, and that the child's language grows as expected according to the normal plan of the language development" (Alhoarna 2006). The lingual development is influenced by some factors such as: sex, mental ability, family, the media, the learning process, sensory, physical and health aspects (Rousan, 1986)

The mental disability affects the acquisition of language skills in children with Down syndrome, and in their ability to use it in their daily life. Compared to the normal, their language achievement is notably low in addition to the lack of their vocabulary, and this causes the weakness of their ability to understand others, and the inability to express their needs (Kiarie, 2006) and a decline in receptive language skills (Abdedoto & Toli, 1995).

The problems of language are considered a distinctive aspect of those with Down syndrome, based on this, the level of linguistic performance of a child with Down syndrome is much lower than the level of linguistic performance of the normal child, which may be due to the lack of weak vocabulary, and the inability of using it to express one self, and the failure to communicate verbally with others. The most important language problems facing those with Down syndrome are the language fluently and quality of vocabulary. It is clear that the vocabulary used by those with Down syndrome is simple and unsuitable for their age (Qaryouti et al, 2001). The language difficulties vary according to the degree of disability. The slightly mentally disabled are late to speak, but they develop the ability to speak, and are characterized by their typical language. As for the severely disabled, big percentage of them are incapable of speaking, as the growth of language does not exceed the stage of uttering sounds which mostly are not understandable (Solomon, 1998).

Therefore, the importance of this study comes from being focused on students with Down syndrome in the city of Najran, and the interest in knowing that they possess the skills of the receptive language, and then to provide the workers with skills that students need in order to work on developing them and drawing the attention of officials to develop the skills of receptive language in students with Down syndrome, and the need to focus on them as one of the basic components of the curriculum for children with Down syndrome.

### **II. Review of literature**

Rousan and Gar (1986) in their study aimed to prepare a Jordanian modified version for the scale of the University of Michigan for the American linguistic skills of the mentally disabled. The findings of the study showed the ability of some of the dimensions and the total degree of the scale to distinguish between the normal and the mentally disabled, and among some age groups, on the other hand. (Mechling, et. Al, 2002) in their

study prepared a study which aimed to evaluate the effectiveness of using the instructions of the computer which is based on the visible video to students with mental disabilities, this is in order to teach them the skill of reading words on the boards in a shop selling vegetables (grocery) to refer to the vegetables in each section and link each name with what it refers to. The sample of the study consisted of (4) students with average mental retardation, between the ages of (9-17 years). The study results showed that the education of the computer-based video led to enabling them to read words and understand them. Using images and linking them to written words helped pupils with average mental retardation to know the word and link it to what it refers to.

Gold Fild (2006) in his study aimed to know the impact of parents in the development of language skills in children with mental disabilities and disorders of language. The sample of the study consisted of 26 children suffering from slight mental retardation and disorders of language ranged in age from two to seven years, the children were divided equally into two groups: Experimental group and Control group. Pre-study test was given to the study sample, and then the experimental group was subjected to a linguistic training program based on the involvement of parents in the language remediation for five months. The study found that there are statistically significant differences between the pretest and posttest attributed to the impact of the proposed language program designed to deal with the linguistic disorders which are based on the involvement of parents in the language remediation.

Ekars (2008) in his article spoke about testing the effectiveness of a language training program for children suffering from a delay in the language development aspects associated with a delay in mental abilities and comparing them with normal children. The researcher selected a sample of 10 children and divided them into two equal groups, Experimental group and Control group, and then subjected the children of the experimental group to a training program. The results showed statistically significant differences between the control and experimental groups in favor of the experimental group which were attributed to the application of the proposed language program.

Bilal (2013) aimed to test the effectiveness of the individual educational plan in teaching receptive language skills to children with Down syndrome. The sample of the study consisted of 14 children (boys and girls) with Down syndrome. The results indicated the effectiveness of individual educational plan in teaching the skills of the receptive language.

### **III. Statement of the problem**

The Problem of the study is determined by the following questions:

1. To what extent do students with Down syndrome in the city of Najran have receptive language skills?
2. Are there significant differences at the level of significance ( $\geq \alpha 0.05$ ) between the mean scores of students with Down syndrome on the scale of the receptive language skills which are attributable to the classroom stage variable?

### **IV. Methodology**

#### **4.1 Population and Sample**

The Study Population and Sample consisted of all students with Down syndrome who are included in the regular schools in the city of Najran for the academic year 1434/1435. The sample of the study consisted of (16) students, (9) students at the elementary level, (7) students at the intermediate level.

#### **4.2 Instrument**

To achieve the objectives of the study, the scale of the University of Michigan of language skills for the mentally disabled (after receptive language) and with the Jordanian amended version that consists of (22) items was used. The scale has been standardized by (25) teaching staff members from the faculty of education from the University of Najran. 21 out of 25 of the teaching staff members in the panel agreed to keep 21 out of 25 items with agreement percentage of (84%). Based on this, the number of items of the scale became (20) items. In order to analyze the results of the study, the questionnaire was classified into two levels (low - high), the two levels became as follows (0-50) (low-level), (51-100) (high level) so, the least grade on the scale is (0) and the highest grade is (20), by the internal consistency was calculated according to the equation of Cronbach's alpha, which revealed the reliability coefficient ( $r = .81$ ) and these ratios were considered suitable for the purposes of this study.

### **V. Results**

**Results related to the first question:** *What is the extent to which students with Down syndrome in the city of Najran have receptive language skills?* To answer this question, the averages and standard deviations of the extent to which students with Down syndrome in the city of Najran have receptive language skills has been extracted.

Table1: Averages and standard deviations of the items in a descending order according to averages

S.	item	Domains	M	SD	Level
1.	1	identify the familiar personal things	.87	.342	high
2.	9	understand the uses of familiar things	.75	.447	high
3.	2	respond to the words of a high kinetic	.56	.512	high
4.	7	distinguish three things together	.56	.512	high
5.	3	follow the instructions for one step	.50	.516	low
6.	5	identify the organs of the body	.50	.516	low
7.	4	follow the instructions for two steps	.44	.512	low
8.	10	Recognize images	.44	.512	low
9.	11	knowing sizes	.44	.512	low
10.	18	Recognize coins	.44	.512	low
11.	8	Understand. prepositions of place	.38	.500	low
12.	15	Classify. Things	.37	.500	low
13.	17	Recognize colors	.31	.479	low
14.	12	Understand singular and plural	.31	.479	low
15.	6	Understand. pronouns	.25	.447	low
16.	16	Understand. the usage of senses	.19	.403	low
17.	19	Recognize directions	.19	.403	low
18.	20	Recognize parts of an image	.6	.250	low
19.	13	follow the instructions of irrelated two steps	.00	.000	low
20.	14	identify the verb in an image	.00	.000	low
TOTAL			.37	.205	low

Table 1 shows that the averages ranged between (0.00 to ,87), where skills to identify familiar personal things came first place with the highest arithmetic average (.87), and high possession level, while the skill to follow the irrelated instructions composed of two steps and skill to identify the verb in an image in the last step with a mean of (0.00), and the arithmetic average of the total score became (.37)

**Results related to the second question:** Are there statistically significant differences at the level of significance ( $\alpha = 0.05$ ) between the mean scores of students with Down syndrome on the scale of the receptive language skills that are attributable to the variable of classroom stage?

To answer this question, the averages and standard deviations of the mean scores of the students with Down syndrome on the scale of the receptive language skills based on the variable of the classroom stage have been extracted.

Table 2: Averages and Standard Deviations of the mean scores of the students based on the variable of the classroom stage.

Categories	Number	M	SD
Elementary	9	6.33	4.873
Intermediate	7	9.14	2.673
Total	16	7.56	7.56

Table 2 shows an apparent variation in the averages and standard deviations of the mean scores of students with Down syndrome on the scale of the receptive language skills because of the different categories of the variable of the classroom stage, and shows the indication of the statistical differences between the averages, the One Way ANOVA was used according to table 3.

Table 3: One Way ANOVA of the impact of the classroom stage on the mean scores of students.

	source	Sum of squares	DF	Mean Square	F	Sig
Classroom Stage	31.080	1	31.080	1.869	.193	.000
	232.857	14	16.633			
	263.938	15				

Table 3 shows that we can see the existence of statistically significant differences at the level of significance ( $\alpha = 0.05$ ) attributable to the classroom stage and in favor of the intermediate stage.

## VI. Discussion

The purpose of this study is to assess the receptive language skills of students with Down syndrome in the city of Najran and the discussion of the results includes the following procedures:

### **6.1 The possessions of students with Down syndrome of the receptive language skills**

As for the first question, the results showed that the possession degree of students of the skills of the study reached (37%) of the vocabulary of the scale, and is classified as low-level according to statistical standard adopted in the current study. The skills to identify the familiar personal things came first with a total mean of ( 0.87 ) and the skills of understanding the uses of familiar things with a total mean of ( ,75 ), and the estimate is high, and can be attributed to the easiness of those items and expected to be mastered by students with Down syndrome, while the skill to follow the unrelated instructions composed of two steps and the skill to identify the verb in an image in the last step and this can be attributed to the difficulty these skills compared to the other skills, and these findings are consistent with the studies of (Goldfield,2006), (Ekars, 2008), ( Bilal ,2013 ), which confirmed that those with Down syndrome need more training for the development of the receptive language skills and work to develop them by different ways and strategies.

### **6.2 The relationship between the levels of possession of students with Down syndrome of the receptive language skills with the variable of the classroom stage.**

As for the second question, the results showed the performance varied on the scale of the receptive language skills among the students with Down syndrome in a variable of the classroom stage (elementary, Intermediate) in favor of the Intermediate stage, and this can be attributed to the development of the receptive language for students with Down syndrome by a factor of maturity, and that's confirmed by a study of ( Rousan,1986 ), which confirmed that the higher the classroom stage is, the more these skills are developed.

### **Recommendations**

In light of the results of the study, the researcher suggests a number of the following recommendations:

1. Giving more interest in further research on the receptive language skills of all categories of disabilities.
2. Engaging Parents in some of the training programs concerned with the training of students with Down syndrome on receptive language skills.
3. Drawing the attention of those in charge of programs for students with Down syndrome to design training programs for in-service teachers.

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