The Effectiveness of an Intensive Reading Program According to the Response to Intervention and Evidence-Based Practices in Treating Dyslexia

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The current study was concerned with revealing the effectiveness of an intensive program according to response to intervention to treat dyslexia. The sample of the study consisted of (25) male and female students with dyslexia, who were formally classified by the Ministry of Education, and chosen intentionally. They are students from the evening center offers reading reinforcement programs, whose ages range between (7-12) years, (7) are Female, (18) Males. The current study followed the quasi-experimental research with a one-group pretest-posttest design. The program application period according to the second stage of response to the intervention was (11) weeks. The results of this study revealed that there is a statistically significant difference in the posttest measurement of the performance of the study group (25 male and female students) due to the effectiveness of the intensive program in treating dyslexia.

Key words: Learning Disabilities; Dyslexia and Response to Intervention (RTI)

1. Introduction:

The process of teaching and evaluating children with dyslexia is one of the most obscure and widespread in the field of learning disabilities, and many specialists and workers in the field of learning disabilities are still searching for best practices to address them. The modern model in the field of learning disabilities, which is the Response to intervention (RTI), has emerged as a model for diagnosis and treatment, by providing therapeutic interventions to all students within multi-level stages, analyzing their responses in the general education environment, and when multiple interventions are ineffective in making progress desired by the student, the
student is transferred and becomes eligible to receive services for learning disabilities and dyslexia accurately.

Many studies indicated that the response to intervention is an effective method of teaching, one of the most important principles of applying this model is the use of effective teaching methods and strategies based on scientific research in developing students' skills, as it is one of the intervention and prevention programs; where it can be offered to kindergarten students or first-grade students as a treatment program for those with educational problems, or as a preventive measure for children at risk.

The study in (Al-Khatib, 2013) emphasizes that much of the literature and research focuses on a treatment known as (response to intervention), and their recommendations include placing students who face learning difficulties in early intervention programs instead of waiting for failure, in addition to that the application of the intervention response model reduces costs, introduces excellent services for all students in the early stages of education, and also reduces the number of students referred to special education services in general (Burns, Jacob, & Wagner, 2008).

Accordingly, this model has received the acceptance of many researchers and workers in learning disabilities and dyslexia in particular, as well as a research trend in recent times, and studies have been particularly interested - in recent years - to study the effectiveness of the response to intervention in the treatment of dyslexia.

The response to intervention was invented in the United States of America as a strategy to determine student eligibility for special education services (Fletcher, Coulter, Reschly, & Vaughn, 2004). Where the beginning of the emergence of the response to intervention dates back to 2001 when the Learning Disabilities Summit in the USA emphasized the need to develop alternative models for the discrepancy model in identifying learning disabilities, in addition to being a suitable alternative to treatment by providing good teaching designs to intensify the intervention, as has been proven effective in defining And identifying those with learning difficulties in a way that reduces the number of difficulties by 70%, and then the response to intervention was formulated in 2004 in terms of foundations and executive steps (Ahmed, 2015; Al-Zayat, 2006).

The study of (Jimerson, Burns, & VanDerHeyden, 2015) states that the Federal Education Act for Persons with Disabilities (IDEA 2004) in 2014 was allowed by the (2004) federal ruling on Response to Intervention (RTI) to be used as part of the identification process. Thus, an idea has been discussed for years, and it has become part of special education systems. As in (Epler, 2017), the response to intervention is not a new concept in the world of education, it has been used for more than (30) years under a variety of names, including the Assistant Teacher Team model, the pre-referral intervention model, the core support team model, the school-based advisory group model, and the problem-solving model. Al-Zayat (referred to in (Masoud,
2014)) adds that the response to intervention attracted the attention of educators, researchers, scientists, and practitioners as a promising introduction to treatment, as it represents a suitable alternative to treatment by providing good teaching designs that intensify interference in general education, and thus distinguish between students with a low academic achievement, Which is due to insufficient teaching interventions, or inadequate among students with learning disabilities who need intensive, appropriate and adequate teaching patterns.

In another study by (Bond, 2017), it was intended to determine the effect of the (RTI) model on achievement at Stanton Middle School. The study concerned with determining whether there was a difference in the achievement of the sixth-grade students who were provided with (RTI) services and those who were not provided with the services of (RTI) for the year 2015-2016 AD, which was measured by the Scholastic Reading Inventory (SRI) scale, the sample included (237) Students (85) from the second and third levels of the response to intervention, and (152) were not provided with services for the response to intervention, as the sample consisted of all sixth-grade students whose ages ranged (9-11) years, and the results indicated that there is a significant statistical difference in achievement when comparing students who received (RTI) services with those who did not.

The study of (Becerra, 2017) also interested in studying the effect of the RTI on the development of student achievement in reading, and the approach used in the study was the quasi-experimental approach, and the sample consisted of (85) students, (40) from the fifth grade and (45) From sixth grade, a set of tests were applied to students, and the results showed statistically significant growth and achievement of students after applying the response to intervention response (RTI).

In a study by (Thomas-Jones, 2017) to compare student performance in reading and mathematics among those receiving (RTI) services, and those receiving regular classroom education from seventh-grade students, during the 2011-2014 academic years, the sample consisted of (170) students from the preliminary school in Illinois, and the sample was divided into two groups: the first group (85) students received (RTI) services during the three years of the seventh grade, and the second group (85) students did not receive the services of (RTI). The Illinois Stanford Achievement Test (170 students of reading and mathematics test) was reviewed. This study used a descriptive quantitative design to compare differences, and the results revealed a fundamental difference in reading and mathematics scores in the (ISAT) by students who received (RTI) services during the three years evaluated during the study.

The study of (Al-Ansari, 2009) entitled “The effectiveness of the response to intervention in developing a word-recognizing skill for people with dyslexia from primary school pupils in the State of Kuwait” aimed at knowing the effectiveness of the response to intervention in developing a word-recognizing skill and the sample consisted of (501) students from both the fourth and fifth grades, the results of the study revealed that the response to intervention reduces the percentage of learning disabilities to 66.6%, and the predictive value of the
response to intervention based on qualitative analysis, and revealed the effectiveness of the response to intervention in the treatment of dyslexia (recognizing the word).

The study of (Maskill, 2012) also aimed to know the effectiveness of the RTI in diagnosing and treating a sample of students who have difficulty in reading and knowing the long-term effectiveness of RTI after stopping it. The study was conducted over four years in a selected primary school, students who participated in RTI were tracked and evaluated throughout the study. The results indicated that most of the students showed improvements during their participation in (RTI) and continued to improve after the services stopped, as (68) students out of (83) reached the required level of performance in the first level, and in the second level (15) students from (83) received the intensive intervention, while discovered (5) students with learning disabilities.

The study of (Teeba, 2016) aimed to evaluate the effectiveness of an early intervention program theoretically based on responding to the intervention by enhancing vocal awareness skills, spelling skills, vocabulary and derivatives, fluency, reading comprehension and its application to ordinary children and those at the risk level for future dyslexia, dividing introductory children into 3 groups, experimental group of 18 children who received instruction in a disorganized way, and two control groups (41 children) received a program that supports acoustics, and children in the three groups were chosen by applying pre- and post-test to assess reading skills and its associated skills. The approach used in the study is the quasi-experimental approach, and the results indicated that children in the experimental group obtained higher degrees than the two control groups, and the author in (Teeba, 2016) confirmed that the program is effective as a preliminary experiment, the study recommended working with larger samples with some adjustments to enhance other reading skills like fluency.

The study of (Wilkinson, 2016) intended to determine the impact of the RTI on students’ achievement in third grade in the Illinois School District in central Illinois. The method used in the study was the quasi-experimental quantitative and qualitative mixed curriculum, and the study sample consisted of (155) students, divided into two groups: experimental of (34) students who received interventions from the second and third level, and the control group consisted of (121) students who are remained at the first level for the duration of the study. A mandatory survey of teachers using a standardized tool was used to measure teachers’ attitudes and perceptions about the effectiveness of the response to intervention, and after analyzing students’ evaluation data and teachers’ responses, the results showed that the RTI greatly affected the achievement of third-grade students.

The study of (Lundin, 2017) aimed to know the effect of the response to intervention (first level) model on reading fluency in primary school. The study included four primary schools in southeastern Texas, and a comprehensive examination and diagnostic evaluation were conducted at the beginning and end of the school year in September and May 2017. For all students in kindergarten through fourth grade, except for students were individual functional
education plan was presented, the results indicate significant growth between pre- and post-test examinations on reading fluency valuations.

The study of (Henderson, 2017) investigated the growth of mathematics and achievement of reading, on a sample that included (7587) students from first grade to sixth grade who passed the reading test, and (7807) students from first grade to sixth grade who passed the mathematics test, in an area a large school in the middle of the western suburb that implements the intervention/multi-level response model between 2013 and 2014, and the growth of reading achievement and mathematics was measured by measures of academic progress, and the initial results of the study indicated a negative impact of the application of RTI in the field of mathematics to all students, and in the field of reading was not the application of RTI has any impact on the growth of achievement of students with and without disabilities.

Despite recent trends concerned with the response to intervention in the field of treatment, the researcher believes that there are a lot of workers in the field of learning difficulties, are unaware of the response to intervention and how it is applied, and the current study came to confirm the effectiveness of the response to intervention as in previous studies and provides an intensive program therapeutically based on the response to intervention, aimed at treating dyslexia in Saudi Arabia. Hence the researcher's interest in studying an intensive program according to the strategy of the response to intervention, and the extent of its effectiveness in treatment, by applying it to a group of students who have been classified within the category of dyslexia.

2. Problem Statement

There is a significant increase in students diagnosed with dyslexia in the Kingdom of Saudi Arabia, and the reason for this may be the lack of remedial actions based on the latest developments in scientific research provided to students in the regular class before their referral, which makes the possibility of misdiagnosis and their referral even though they may have educational problems due to other reasons, such as ineffective teaching, or due to a lack of motivation to learn, or other reasons. This study attempts to reveal the effectiveness of an intensive program according to the strategy of the response to intervention in treating dyslexia.

3. Research Questions

Q1: How effective is an intensive program according to the strategy of the response to intervention in treating dyslexia among a sample of students diagnosed with dyslexia?

4. Research Objectives

This study aimed to uncover:
The effectiveness of an intensive program according to the response to intervention in addressing dyslexia among a sample of students with dyslexia.

5. Significance of the Study

A. Theoretical importance:

The theoretical importance of the study is as follows:

1. A teaching model is presented that deals with the treatment of dyslexia among diagnosed students with dyslexia according to the response to intervention.
2. Highlighting the problem of students with dyslexia.

B. Applied importance:

They applied importance is as follows:

1. Applying an intensive program according to the response to intervention, which helps develop reading skills for students with dyslexia.
2. Providing a treatment model based on the response to intervention as a teaching strategy.
3. Providing some recommendations and proposals in the treatment of students with dyslexia.

6. The scope of the study

- The Objective Scope: The objective limits of the study were limited to knowing the effectiveness of an intensive program according to the response to intervention model in treating dyslexia and reducing the percentage of people diagnosed with learning disabilities.
- Time scope: The study was applied during the first semester of (2019/2020).
- Spatial scope: The study was applied at an evening center in Dammam, Saudi Arabia.
- Human scope: The study was limited to (25) male and female students with dyslexia who were classified by the Ministry of Education. Their ages range from (7-12) years, (7) females, and (18) males.

7. Definitions of Operational Terms

1. Dyslexia: Dyslexia is a partial deficiency in the ability to read or understand what the student is reading in silence or loud (Al-Qamish, Khawaldeh, Al-Ma’ti, & Abdullah,
2013). They are students who are officially diagnosed within the special education category (dyslexia) according to the procedures of the Kingdom of Saudi Arabia.

2. **The response to intervention model**: the response to intervention model is a practice that is used with all students in regular classes, with students who are at risk of school failure, and students expected to have disabilities (including students suspected of having learning disabilities or minor disabilities). The goal of responding to the intervention is to prevent the academic failure of all of these students (Lerner & Johns, 2014).

3. **Response to intervention**: is a set of educational interventions and services provided to all students within multiple levels and analyzing their responses in the general education environment, in this study we are concerned with the second and third-level students to treat people with dyslexia. The stages represent three levels, namely:
   - **The first level**: providing educational services to all students in the general education environment in accordance with effective education strategies and methods, and granting continuous monitoring of the progress of students, and modifying procedures to suit their needs so that 80% of students benefit from them.
   - **The second level**: Intensifying provision of educational services in the general education environment for students who are not beneficiaries of the first-level services, according to effective education strategies and methods, and granting continuous monitoring of the progress of students, and modifying procedures to suit their needs so that 15% of students benefit from them.
   - **The third level**: Intensifying provision of educational services in the general education environment individually, according to effective education strategies and methods for 5% of students and those who do not benefit from the second level services, and granting continuous monitoring of the progress of students, adjusting procedures to suit their needs, and when the student is unable to progress at this level referring him for special education services or additional evaluation.

8. **Research Methodology and Procedures**
   - **Study Methodology**: This study follows the quasi-experimental approach, to know the effectiveness of an intensive program according to the response to intervention model in treating students with dyslexia. The researcher used quasi-experimental research with a one-group pretest-posttest design.
   - **Study variables**: the independent variable is the intensive treatment program based on the response to intervention. The dependent variable is the level of student performance.
Study Population: The study population is represented by students who have difficulty reading in the eastern region of the Kingdom of Saudi Arabia.

Study Sample: The study sample consists of (25) male and female students with dyslexia, who were formally classified by the Ministry of Education, and were chosen intentionally, representing students at an evening center in Dammam, Saudi Arabia, ages (7-12) years, (7) of the female and (18) of the male.

9. Study Tools:

1. Reading skills scale for students with dyslexia (prepared by the researcher).
2. The intensive treatment program for developing reading skills among students with dyslexia prepared and presented according to the response to the intervention model.
3. Proficiency test for students with dyslexia (prepared by the researcher).

The description of the above tools is as follow:

- **Reading Skills Scale for Students with Dyslexia (Prepared by The Researcher)**

The scale contains (6) main dimensions, 5 of which are concerned with basic reading skills that the primary school students must have, and the students with dyslexia are struggling with. The dimensions are: (reading letters, reading words, reading sentences, reading fluency, and reading comprehension). Each dimension in the scale has 25 paragraphs related to it so that it can be measured according to the passages of the proficiency test, which contains questions on each scale paragraph, and it is presented to the student.

- **Study Tool Validity**

The researcher presented the study tool to (12) arbitrators from the teaching staff in the special education departments of some universities in the Kingdom of Saudi Arabia, and Egypt to determine the accuracy and clarity of the paragraphs and their link to the dimensions to which they belong, and the tool was accepted, as the tool showed that it possesses content validity.

- **Study Tool Reliability (Internal Consistency)**

The reliability of the scale was calculated using the re-test method, about (20) days after the first application on a sample of (15) students from outside the study sample from the third-grade students, and the alpha Cronbach coefficient was used to find the consistency coefficient as shown in the following table:
Table 1: Alpha Cronbach coefficient to measure the reliability of the total scale Reliability Statistics.

<table>
<thead>
<tr>
<th>Number of Items</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>.941</td>
</tr>
</tbody>
</table>

Through the above table, we find that the stability coefficient between the first test and the retest of the scale is (0.941), which is a high degree of reliability.

Table 2: Alpha Cronbach coefficient to measure the reliability of the sub-dimensions of the scale Reliability Statistics.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>No of Items</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character reading dimension</td>
<td>4</td>
<td>.945</td>
</tr>
<tr>
<td>Reading words dimension</td>
<td>9</td>
<td>.919</td>
</tr>
<tr>
<td>Reading Sentences dimension</td>
<td>3</td>
<td>.846</td>
</tr>
<tr>
<td>Reading fluency dimension</td>
<td>4</td>
<td>.925</td>
</tr>
<tr>
<td>Reading comprehension dimension</td>
<td>5</td>
<td>.823</td>
</tr>
</tbody>
</table>

The above table shows the reliability coefficients of the sub-dimensions of the reading skills scale for students with dyslexia (prepared by the researcher), where the value of the coefficient of stability ranged for reading letters dimension (0.945), reading sentences dimension (0.846) and the percentages reached indicating that the study tool has a high degree of the reliability to be applied the current study.

- The therapeutic program for developing reading skills among students with dyslexia:

**Program Description:** The program was built to focus on developing basic reading skills experienced by students with dyslexia, and the teaching process in the program was presented according to students' levels in the pre-test, where education was provided to them according to two groups; beginner Level group, and Advanced Level group.

Table 3: Explain the dimensions of the program and the most important strategies applied based on scientific research in teaching students with dyslexia

<table>
<thead>
<tr>
<th>Dimensions of the program</th>
<th>The strategy used</th>
<th>Evaluation methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading character dimension</td>
<td><strong>The Hegge and Kirk method:</strong> This method is based on multiple senses in teaching reading and exercises of repetition and practice, and linking each sound to the letter indicated by it, as it is based on the principle of the phoneme method, as it relies on a good link between sound and the indicative written symbol, in addition to tracking Pupils for the letters of the word letter by letter.</td>
<td>Note, worksheets, proficiency tests.</td>
</tr>
<tr>
<td>Reading words dimension</td>
<td>Fernald Method (VAKT): This method uses multiple senses to teach reading and writing and is based on the entrance to word learning, and this method integrates linguistic expertise and tracking methods in a multi-sensory method (the overall method). Flashcards were also used extensively during the learning process at this stage. In addition to a set of strategies used by the teacher.</td>
<td>Note, worksheets, proficiency tests.</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Reading sentences dimension</td>
<td>Gillingham Stillman method: This method focused on confirming the relationship between learning the letter and sound and activating this relationship between words by mixing between different sounds or what is called phoneme synthesis so that students learn the interlinkages that can arise between alphabets and their phoneme synonyms, and after proficiency Interactions between letters and their sounds, the student begins to combine the alphabet to form words, then gradually begins to introduce spelling, and read the text with the development of flexibility. In addition to a set of strategies used by the teacher.</td>
<td>Note, worksheets, proficiency tests.</td>
</tr>
<tr>
<td>Reading fluency dimension</td>
<td>Repeated reading strategy: It is an educational strategy to build fluency in reading, in which the student reads the text several times until he reaches the test of the skill required in reading. In addition to a set of strategies used by the teacher.</td>
<td>Note, worksheets, proficiency tests.</td>
</tr>
<tr>
<td>Reading comprehension dimension</td>
<td>K-W-L strategy: It is a metacognition strategy, which aims to develop the skill of reading comprehension, and works to stimulate students’ previous knowledge, and make it a starting point or a focal point, to link it with the new information contained in the read text, and requires the student to define what he already knows, and what he wants to know, and then the student reads and notes the information, and determines what he has already learned. spellcheck: These are instructional procedures based on teaching the rapid spelling of a short text for a group of pupils (working in small groups), then writing these pupils to the notes during the spelling, compiling the text and reconstructing it in light of the cooperation of the members of each group, and exchanging views on the grammatical accuracy of the grammatical pieces The students exchange opinions on it and then compares the spelling of the students’ books to the dictated main text. In addition to a set of strategies used by the teacher.</td>
<td>Note, worksheets, proficiency tests.</td>
</tr>
</tbody>
</table>
The validity of the tool: The program was presented to (10) specialists and experienced in dyslexia, and the contents of the program were accepted and related to the skills evaluated in the study, and the program demonstrated its content validity.

Description of the proficiency test prepared by the researcher: The test consists of 25 questions so that each of the basic reading skills is evaluated by a question, and 5 grades are allocated for each question. For example, the proficiency questions for the dimension of reading the sentences by putting five sentences to be read by the student correctly.

- Study Procedures:

1. An evening center in the city of Dammam in the Kingdom of Saudi Arabia contains a group of students with dyslexia was chosen, they were diagnosed with dyslexia from the Ministry of Education and were receiving literacy lessons.
2. Agreement with the Center to apply the current study, which is a remedial program based on the response to intervention model concerned with providing methods and strategies based on scientific research and aims to improve the level of students in reading, which benefits the students and the center.
3. Taking the approval of the parents of students with dyslexia to join the students in the study sample.
4. Reaching a sample of (25) students of dyslexia students enrolled in the center.
5. Choosing a general education female teacher for the first grade with high efficiency and experience to apply the response to intervention model with its strategies, methods, and continuous assessments for students, under the supervision of the researcher and training her.
6. pre-application of the reading skills scale for students with dyslexia, before starting the introduction of the intensive program according to the response to intervention model.
7. Presenting the program for (15) weeks within one stage equivalent to the second stage of the response to intervention.
8. The model is presented as one session per day for (60) minutes, at a rate of (5) days per week.
9. Applying teaching methods and strategies based on scientific research, such as: (Fernald’s method, Gillingham Stillman’s method, Hegge and Kirk’s method, KWL strategy, spellcheck, and repeated reading strategy).
10. Distributing students into two groups based on their levels, the beginner level group, and the advanced level group.
11. Continuously following students' evaluation during the implementation of the program, the program included (4) formal assessments during (12) weeks, so that the scale is reapplied every 4 weeks in order to identify the extent of student improvement, in addition to daily and continuous individual assessments to follow up and monitor improvement the students.
12. Use different methods of evaluation (note, worksheets, and proficiency tests).
13. Collecting evaluation data to determine the level of progress for each student in order to know the effect of the response to intervention model in addressing dyslexia.

10. Results and Discussion

In this section, the results of the study will be presented after using the appropriate statistical analysis of the data to reach the results and discuss each question given the theoretical framework and previous studies. Following is a presentation of the study question that will be discussed:

- How effective is an intensive reading program according to the response to intervention model in addressing dyslexia among a sample of students diagnosed with dyslexia?

To answer this question, the study group performance averages were calculated on (pre-test) before applying the response to intervention model, and (post-test) after applying the response to intervention model on (reading skills scale for students with dyslexia, prepared by the researcher). The Paired-sample T-Test was used to calculate the differences between the performance of the study group averages in (pre-test) and the study group arithmetic averages in (post-test), to know the impact of the response to intervention model as a teaching strategy in treating dyslexia as described in the table below.

Table 4: The results of the paired-sample T-Test to calculate the differences between the averages of the study group performance (25 male and female students) on pre-test (total) and post-test (total).

<table>
<thead>
<tr>
<th>Paired samples</th>
<th>Arithmetic average</th>
<th>standard deviation</th>
<th>The difference between the averages</th>
<th>T value</th>
<th>Degrees of freedom</th>
<th>Statistical significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total pre-test</td>
<td>2.2845</td>
<td>.59648</td>
<td>-1.41776</td>
<td>-7.273</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Total post-test</td>
<td>3.7023</td>
<td>.95881</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

It appears in Table 4 that the average performance of the group in the post-test is higher than the average performance of the group in the pre-measurement, and the statistical significance is 0.00 which indicates that the difference is statistically significant in favor of the group's performance on the post measurement. Table 5 shows that all differences are statistically significant in favor of post-test measurements in all dimensions.
Table 5: Results of paired-sample T-Test to calculate the differences between the averages of the study group performance (25 male and female students) on the sub-dimensions in (pre-test) and (post-test).

<table>
<thead>
<tr>
<th></th>
<th>Arithmetic average</th>
<th>standard deviation</th>
<th>The difference between the averages</th>
<th>T value</th>
<th>Degrees of freedom</th>
<th>Statistical significance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>After reading the letters</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>3.4737</td>
<td>1.35117</td>
<td>-1.28947</td>
<td>-4.307</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>4.7632</td>
<td>.44467</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>After reading the words</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>1.9415</td>
<td>.99199</td>
<td>-1.91813</td>
<td>-6.947</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>3.8596</td>
<td>1.23830</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>After reading the sentences</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>1.5789</td>
<td>.80002</td>
<td>-2.05263</td>
<td>-6.065</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>3.6316</td>
<td>1.51084</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>After reading fluency</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>1.2763</td>
<td>.53938</td>
<td>-1.28947</td>
<td>-3.734</td>
<td>24</td>
<td>.002</td>
</tr>
<tr>
<td>Post-test</td>
<td>2.5658</td>
<td>1.47865</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>After reading comprehension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>2.2526</td>
<td>.52001</td>
<td>-1.02105</td>
<td>-4.964</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Post-test</td>
<td>3.2737</td>
<td>1.00269</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It was clear from reviewing the results of the study that the response to intervention model is an effective model in developing reading skills among students with dyslexia, as it is a diagnostic criterion that contributes to discovering people with learning disabilities and reducing their proportion. The results related to the first question, which states: “How effective is an intensive program according to the response to intervention model in treating dyslexia among a sample of students diagnosed with dyslexia?” Revealed that the response to intervention has clear effectiveness in treating dyslexia, the results indicated that there are statistically significant differences in favor of the post-test measurements, and the researcher attributes this to the fact that the program based on the response to intervention model depends in the teaching process on various and high-level strategies, as it is scientifically proven. Also, the decision-making process regarding the method used in the teaching process passes through stages of multiple measurements, continuous observation, and direct data monitoring. This makes the teacher provide the appropriate interventions at the right time and the appropriate way for all students. The model also stipulates that the teacher is an expert teacher in the field, and all studies confirm the role of the active teacher in raising the level of achievement among students, and it is still considered the most important factor despite all changes. What distinguishes this model from other models is that it is a remedial model based on the accurate diagnosis of each case, which makes it more effective in the treatment process.
The results of this study are also consistent with the study (Al-Ansari, 2009; Becerra, 2017; Bond, 2017; Gray, 2018; Lundin, 2017; Mofadal, 2014; Teague, 2016; Teeba, 2016; Thomas-Jones, 2017; Wilkinson, 2016) which demonstrated the effectiveness of the response to intervention (RTI) model as a therapeutic teaching model aimed at developing students' skills.

11. Recommendations

In view of the results of the current study, the following recommendations and proposals were put forward:

1. Conducting more studies about the effectiveness of the response to intervention in treating people with dyslexia.
2. Encouraging researchers to conduct similar studies of the current study targeting other learning disabilities such as calculation disabilities, writing disabilities, and developmental disabilities.
3. Adopting the response to intervention as a diagnostic test in the Kingdom of Saudi Arabia as a treatment model that introduces the intervention before children are judged to fail and contributes to reducing the rates of diagnosis of learning disabilities.
4. Ministries of Education at the local and Arab levels adopt an approach based on the response to intervention in general education schools, training for specialists and teachers, and educating the community towards the response to intervention model.
5. Urging learning disabilities teachers to use effective and scientifically proven strategies and teaching methods in teaching people with learning disabilities.
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