

The Indicators of Evaluate Children with Mathematics Learning Disabilities in Khartoum State-Sudan

Eldood Yousif Eldood Ahmed

Department of Psychology, Faculty of Arts, University of Omdurman Islamic, Sudan, Omdurman, Alfetehab
Department of special education, Faculty of Education, University of Jazan, Saudi Arabia

ABSTRACT

This study was conducted during (2014- 2015) in special educational center in Khartoum state, Sudan. The study aimed to evaluate children with mathematics learning disabilities. Researcher used descriptive methods, applied evaluating children with mathematics learning disabilities questionnaire, and was designed by researcher. The community of this study consisted teachers of learning disabilities (53) teachers. Sample was chosen randomly included (22) teachers, including (8) mails and (14) females. Researcher used statistical package for social sciences (SPSS) depends on T-test for one sample, Pearson correlation coefficient. the results are as following: The indicators of evaluate children with mathematics learning disabilities is positive, the level of visual perception disorder among children with mathematics learning disabilities, is significant, the level of visual discrimination disorder among children with mathematics learning disabilities , is significant and the level of auditory processing disorder among children with mathematics learning disabilities , is significant.

Keywords: *Visual Perception Disorder, Visual Discrimination Disorder, Auditory Processing Disorder.*

I. INTRODUCTION

The quality of teaching strategies among children with learning disabilities is very important, because it enhancing building useful learning. The study of Brian R. Evans (2013) suggested that a challenge for new teachers enrolled in alternative certification programs is to ensure that all of their students are receiving a high-quality education, particularly in mathematics education. As teachers enter classrooms in less affluent urban schools with majority African American and Latina/o students, it is imperative teachers be fully prepared to teach these students with high-quality instruction. teaching in mathematics should be “rooted, in part, in the belief that all children should have access to rich, rigorous mathematics that offers opportunities and self-empowerment for them to understand and use mathematics in their world” . On one level there are important variables for teacher quality, such as content

knowledge, teacher attitudes and beliefs, and teacher efficacy. All of these variables are necessary, but not sufficient, for quality teachers to possess. On another level there are important variables necessary for quality teaching including social justice orientations, cultural responsiveness, connecting the mathematics to lives of the students, and fostering an atmosphere of trust and care in the classroom. The study of (Evers. T, 2013) suggested that a brief review of the evolution of specific learning disability since its emergence as a disability category in the 1960 provides the context for wisconsin's revised specific learning disabilities rule. Historically, the concept of specific learning disabilities has been associated with disorders in cognition and learning existing within an individual resulting in delays in academic and school performance skills such as reading, math, and language. These delays occur despite adequate instruction and have been referred to as unexpected underachievement. The study of Gersten. S & et al (2007) suggested that though the research into

early mathematics assessment is in its infancy, an emerging knowledge base is permitting us to draw important conclusions that can help guide further research and practice in the field. The study of Jordan. c. Nancy & et al (2009) Suggested that investigating instances of mathematics difficulties mathematics difficulties and disabilities in elementary school-aged students continues to receive increasing amounts of attention. Differences in student performance between struggling learners and their high achieving counterparts are evident as early as kindergarten, and without proper implementation of effective and research based intervention strategies and initiatives, the achievement gap will continue to widen. Moreover, causal links between the early numbers sense cultivated in the primary years and the successful completion of advanced mathematics courses in high school and college have been established through research. The study of Gooding. S (2009) suggested that children's poor performance with mathematical word problems is a trend that I became aware of very early on in my teaching career and one that an interest has been taken in by many who are involved in mathematics education [5].

1.1 Why quality mathematics education?

The study of Tang. Q (2012) suggested that quality mathematics education should enable pupils to form a positive and appropriate image of mathematics. For that to be possible, it must be faithful to mathematics, both in its content and practices. It should enable pupils to understand which needs are met by the mathematics that they are taught and that mathematics forms part of a long history linked to the history of humanity. Learning mathematics also entails acquiring the means of gaining access to this cultural heritage. Mathematics education should thus enable pupils to understand that mathematics is not a static corpus of knowledge but, on the contrary, a living and expanding science, whose development is nourished by that of other nourishes them in turn. It should also enable pupils to see mathematics as a science that can and must contribute to the solution of today's major world problems, which were mentioned in the joint introduction. Quality mathematics education must thus be sustained by a vision of mathematics as a living science, grappling with the real world, open to relations with other disciplines and not disciplines only. In particular, it must enable pupils to understand the power of mathematics as a tool

for mounding understanding and in uencing the world . The study of Gibbs. G (2010) suggested that the conception of quality: Quality is such a widely used term that it will be helpful first to clarify the focus of this report, also relevant when examining the validity of student judgments of the quality of teaching, where what they may want teachers to do may be known from research evidence to be unlikely to result in educational gains. What is focused on here is not necessarily, what students like or want, but what is known to work in terms of educational effectiveness. The study of Bradley. K & et al (2006) suggested that the Australian association of mathematics teachers has identified three domains for quality: (a) professional knowledge, (b) professional attributes, and (c) professional practice. Professional knowledge includes vast, general knowledge for use in professional work. Professional attributes include enthusiasm and commitment to various communities with continual desire for improvement, both personally and for students. Professional practice consists of intentional techniques that lead to positive learning outcomes for students. These domains provide a relevant and useful framework for conceptualizing a quality teacher. The study of Tang. Q (2012) suggested that mathematical activity is a multifaceted human activity, very different from the stereotypes often attached to it in popular culture. Quality mathematics education must therefore, that diversity in the different mathematics content gradually encountered by pupils. The study of Colclough. C & et al (2005) suggested that how can quality be studied in light of these very different approaches? One way is to return to basics: the objectives of cognitive development and nurturing of particular sets of values, attitudes and skills that are important aims of all education systems. A review of the main elements of education systems and how they interact provides a useful map for efforts to understand, monitor and improve quality. The study of Tang. Q (2012) suggested that many misunderstandings also affect people's view of mathematical activity, owing to their perceived image of mathematicians. Mathematics is still often perceived as an almost exclusively solitary activity, cut off from the Problems of the real world and independent of technology. Furthermore, it is often still seen as a purely deductive activity in which perfectly rigorous formal proofs are used to produce theorem after theorem. Finally, it is often considered that mathematics is a science that is not for everyone and that girls, in particular, are likely to

encounter more difficulties than boys in learning mathematics.³ these many misunderstandings affect teaching and raise barriers to quality mathematics education for all. The study of Colclough. C et al (2005) suggested that how can quality be studied in light of these very different approaches? One way is to return to basics: the objectives of cognitive development and nurturing of particular sets of values, attitudes and skills that are important aims of all education systems. A review of the main elements of education systems and how they interact provides a useful map for efforts to understand, monitor and improve quality.

Researcher say that responsibility to provide high quality instruction to all students, we must become knowledgeable of and choose to employ techniques that make classroom instruction equally accessible to this unique population of learners.

1.2 Carrying Out the Mathematical Difficulties

The study of Hulme and Snowling (2009) suggested that can occur here with children's selection of, and aptitude with calculation strategies (for example formal algorithms, pencil and paper methods and calculators). The study of Gooding. S (2009) suggested that the context in which a word problem is given and the size of numbers involved can influence children's choice of a calculation strategy [5]. The study of Hulme and Snowling (2009) suggested that math's disorder' occurs quite frequently and that it is quite commonly associated with reading difficulties.

1.3 Math Difficulty

The study of Wai Lan. C. Winnie (2012) suggested that include understanding simple number concepts, (place-value concept), making sense of number facts and procedures, everyday tasks like (shopping, time planning), may "overcome" by rote-learning the procedures, primitive strategies without genuine understanding and Problematic for upper-grade learning. The study of Dowker. A (2009) suggested that any studies indicate that young primary school children often do use derived fact strategies, often without direct teaching, one of the earliest to emerge is the 'counting-on from-larger' or 'min' concrete addition strategy, whereby the child adds two numbers (e.g. $2 + 6$), by representing the larger number (e.g. with fingers) first,

and then 'counting-on' the smaller number: "6,7, 8 - it's 8!" this involves implicit use, with or without an explicit knowledge, of the commutatively Principle, by contrast, there are many sophisticated strategies involving the use of decomposition for multi-digit arithmetic, that appear late and appear to characterize unusually skilled mental calculators a key issue for consideration is whether the use of derived fact strategies is significantly worse in children with known mathematical difficulties than in unselected children. On the one hand, there is certainly evidence from some studies that children with mathematical difficulties often rely on counting strategies to the exclusion of both retrieval and derived fact strategies. Found that elementary school children with mathematical disabilities relied more on counting, made more counting errors and made less frequent use of derived fact strategies, from the 'min' strategy to decomposition strategies, less frequently than children without such difficulties. Such relative infrequency of derived fact strategies may be in part due to problems with working memory, which makes it harder for children to keep track of several steps of a problem in memory. Since the use of derived fact strategies involves keeping a known fact in memory while carrying out the strategy necessary to derive the new fact, it is likely to be impaired by working memory difficulties. Moreover, children with mathematical disabilities know fewer facts to start with. This could work in two directions. Knowing relatively few facts by heart may make it more necessary to use derived fact strategies, as direct retrieval is less often possible. The study of Rachel E. Pepper & et al(2012)suggested that when identifying such difficulties we define mathematics in a broad sense as encompassing not just calculations (algebra, performing integrals, taking derivatives) but also including thinking about geometry, symmetry, vector calculus, and integrals (both vector and scalar) and the interpretation of calculations .

1.4 The impact of Auditory Processing Disorders

The first research into auditory processing disorder began in 1954 with Helmer Myklebust's study, "auditory disorders in children. The study of Esplin. J & Wright. C. (2014) suggested that The impact or effect of auditory processing disorder can create difficulty in hearing, akin to a peripheral hearing loss, causing hearing and learning impairments. The negative impact auditory processing disorder can have on language and

reading has also been reported. Auditory processing disorder often occurs in conjunction with other disorders like dyslexia attention deficit hyperactivity disorder, language impairment, autism spectrum disorder and / or reading disorders. A well cited University of Auckland study found 94% of children with APD also had language impairment and/or a reading disorder. But it is not known about the cause and effect and if the language and learning difficulties may be caused by the auditory processing disorder. Causality is difficult to establish as research in auditory processing disorder is primarily based on cross-sectional rather than prospective longitudinal studies. The study of Brandstaetter. P & et al(2003) suggested that Children under the age of seven cannot be evaluated comprehensively, as language and auditory processes are still developing. Also, the presence of APDs cannot be legitimately evaluated when the child's primary language is not English. As with all students being considered for special education, the team must consider the needs of the whole child. If children with learning disabilities do perform better with clear than conversational speech, then detailed acoustic analyses of the naturally produced conversational-toclear speech transformation could provide valuable information about the underlying perceptual deficit by highlighting specific acoustic–phonetic features of the signal that are spontaneously enhanced by this listener oriented, stylistic variation in speech production.

1.5 What are Auditory Processing Disorders?

The study of Jay R. Lucker (2012) suggested that definition of auditory processing: Those things the central nervous system does when it receives auditory information and gets it to the brain where it eventually will form meaningful concepts .Thus, auditory processing disorders are: The various things that can breakdown in the central nervous system's task to process the information it receives through the auditory system. In addition problems people may have with auditory processing include are: Listening (noticed for a period of time), mishearing/discrimination problems, problems following directions, problems attending to oral messages, distracted by background noises, poor organization of verbal material, oral and written expression problems, remembering what they hear and learning to read. The study of Esplin. J & Wright. C. (2014) suggested that auditory processing disorders is heterogeneous and this should be reflected in testing and

intervention with remedial plans needing to be individualized. Evidence shows it is important that there are a range of intervention strategies used to meet the living and learning needs of the child. These include visual, environmental, teaching and learning strategies. Personal systems are reported as the intervention option to provide the most benefit, for the most children, but that they should not be used on their own without other inputs or strategies. Dominic. H ffytche et al (2010) suggested that Poor visual perception can cause confusion leading to self-doubt, reluctance and hesitation in classroom participation. Also, suggested that visual discrimination: Ability to identify and discriminate between letters, numbers, shapes or objects. Students need to understand and differentiate what they see as they have different meanings.

1.6 Literature Review

The study of Dowker. A(2009)suggested that in decade that 339 children aged 6 and 7 at Oxford primary schools took part in a study of arithmetic performance on the standardized arithmetic tests was independently affected by both Addition Performance Level and group membership (unselected children versus those with mathematical difficulties). Derived fact strategy use was affected by Addition Performance Level, but there was no independent effect of group membership. The study of Daher. W (2009) suggested that aims at describes pre-service teachers' perceptions of the use of applets in solving mathematical problems, indicate that, though most of the participants thought that mathematical problems could be solved without applets, they emphasized the role of applets as fostering, facilitating and clarifying mathematical problems' statement and solution. The participants pointed at applets as tools which learners enjoy working with, so they will be encouraged to solve mathematical problems using them. What influenced the participants' perception of the need to use applets for solving mathematical problems were their ability to solve problems using them, their ability to solve problems without them and the type of difficulties faced by them during the solving process. The study of Grehan. M & et al (2010) suggested that the study aims at carried out by the Mathematics department at the national university of Ireland Maynooth to determine why students do or do not engage with mathematics support, results indicate that the students' mathematical backgrounds do not appear to be the only major factor in

determining engagement. We found that both groups experienced similar difficulties and problems. However, the second group had several different strategies or coping mechanisms to enable them to get through. The study of Lowe.T & Hasson. R (2010) suggested that the aim of the assessments is to encourage and support learning. The style of assessment used is described together with details of their development and how they are integrated within the module teaching strategy. Data showing how the assessments were used by students on the first presentation of the module are given, together with some student feedback and issues encountered. Although the uptake of these assessments was not as great as hoped, the student experience has been generally positive. The study of Ní Fhloinn. E (2010) suggested that the programme aims to increase the confidence levels and mathematical standards of local secondary school pupils from disadvantaged areas, while raising the profile of mathematics within the schools, through an intervention in which Dublin City University students provide free, one-to-one mathematics tuition on a weekly basis. The feedback from both tutors and pupils was extremely positive, with both groups identifying significant personal benefits as a result, as well as the mathematics results of school pupils increasing overall. In addition, the school principal singled out the programme as having made third-level education seem like a reasonable expectation for students in school. Finally the aims of this study to determine the indicators of evaluate of children with mathematics learning disabilities, the level of visual discrimination disorder, the level of visual discrimination disorder and the level of auditory processing disorder among children with mathematics learning disabilities, of high quality and safe services, which meet the needs of children with learning disabilities throughout the life course. In addition to verify their aims by answer following question are:

1. What the indicators of evaluate of children with mathematics learning disabilities?
2. What the level of visual perception disorder among children with mathematics learning disabilities?
3. What the level of visual discrimination disorder among children with mathematics learning disabilities?
4. What the level of auditory perception disorder among children with mathematics learning disabilities?

II. METHODS AND MATERIAL

2.1 Study design

2.1.1 Research Method.

In a study, the researcher used descriptive method, depend on analytical technique. In addition, were consists of questionnaire adapted by the researcher.

2.1.2 Sample technic

It formed from male and female teachers of children with mathematics learning disabilities, in special education center, Khartoum, Sudan. The researcher used a simply random sampling method. The sample was consist of (22) teachers of learning disabilities.

2.1.3 Tools Technique

The questionnaire was conducted by the researcher, is formed from (19) phrases distributed into three dimensions, visual perception disorder includes (6) phrases, visual discrimination disorder includes (6) phrases, Auditory processing disorder includes (7) phrases, In order to ensure the validity and reliability of the questionnaire form, it distributed to four instructors who had completed their doctorates and this form developed in accordance with the opinions of the instructors, then pilot were conducted and the value of reliability was found. It was about (0.87) and after that, the questionnaire forms became ready for application.

2.1.4 Practical Procedures

The principle of voluntarism was the pre-condition of participating in questionnaire. For the questionnaire, an explanation was prepared. The goal of the research and how the study would be carried out were clearly stated in it. In addition, it was emphasized that the identities of the participants would remain confidential. During the questionnaire, written forms were used. Questionnaire took place between 1-6 month, and the researcher used E-mailing technique to answering the questionnaire.

2.1.5 Data Analysis

After collecting data, the researcher used many tests are T- test for one sample, T-test for independent samples test, pearson correlation coefficient to examine the study hypotheses depend to SPSS program. Materials and methods are written in this area. Describe in detail the

technic used, the Name and the references of laboratory materials used should be cited.

2.2 Study Group

It formed from male and female student with learning difficulties in special educational center, Khartoum, Sudan (67) of male and female teachers of children with learning disabilities. It included the age group between 27-42 years, with an average 35 year, distributed in different gender and economic level as in table1.

III. RESULTS

3.1. What the indicators of evaluate of children with mathematics learning disabilities? To answer this question, the researcher used (T) test for one sample, table1. showed the result. When we compare the mean respectively (80.05), with standard mean (66), we found the mean is greater than standard mean and the significant level (0.00) is greater than the sig value (0.00), this is means that the level of the appropriateness of the curriculum among mathematics learning disabilities is positive (high than normal level.

3.2 What the level of visual perception disorder among children with mathematics learning disabilities? To answer this question, the researcher used (T) test for one sample, table 2. showed the result. When we compare the mean respectively (44.42), with standard mean (21), we found the mean is greater than standard mean and the significant level (0.00) is greater than the sig value (0.00), this is means that the level of the appropriateness of teaching aids among mathematics learning disabilities is positive (high than normal level.

3.3 What the level of visual discrimination disorder among children with mathematics learning disabilities? To answer this question, the researcher used (T) test for one sample, table 3. showed the result. When we compare the mean respectively (30.33), with standard mean (18), we found the mean is greater than standard mean and the significant level (0.00) is greater than the sig value (0.00), this is means that the level of the appropriateness of the classroom environment the curriculum among mathematics learning disabilities is positive (high than normal level.

3.4 What the level of auditory processing disorder among children with mathematics learning disabilities?

To answer this question, the researcher used (T) test for one sample, table 4. showed the result. When we compare the mean respectively (13.82), with standard mean (9), we found the mean is greater than standard mean and the significant level (0.00) is greater than the sig value (0.05), this is means that the level of the appropriateness of the level of auditory processing disorder among children with mathematics learning disabilities, is significant.

Table1. showed the indicators of evaluate of children with mathematics learning disabilities.

| Variable | Mean | Std | T | df | Sig |
|------------|------|------|-----|----|------|
| Mathematic | 80.6 | 14.0 | 4.9 | 21 | 0.00 |

Table 2. Showed the level of Visual perception disorder among children with mathematics learning disabilities.

| Variable | Mean | Std | T | df | Sig |
|-------------------|------|-----|-----|----|------|
| Visual Perception | 6.2 | 3.6 | 3.7 | 21 | 0.00 |

Table3. Showed the level of Visual discrimination disorder among children with mathematics learning disabilities.

| Variable | Mean | Std | T | df | Sig |
|-----------------------|------|-----|-----|----|------|
| Visual Discrimination | 13.9 | 3.1 | 7.4 | 21 | 0.00 |

Table 4. showed the level of Auditory processing disorder among children with mathematics learning disabilities.

| Variable | Mean | Std | T | df | Sig |
|---------------------|------|------|------|----|------|
| Auditory Processing | 13.8 | 20.1 | 10.7 | 21 | 0.00 |

IV. DISCUSSION

1. The level of evaluating of children with mathematics learning disabilities is Significant, (positive). On line, the study of Ní Fhloinn. E (2010) suggested that the feedback from both tutors and pupils was extremely positive, with both groups identifying significant personal benefits as a result, as well as the mathematics results of school pupils increasing overall, the school principal singled out the programme as having made third-level education seem like a reasonable expectation for students in school. In addition, the study of Lowe.T & Hasson .R (2010) suggested that how the assessments were used by students on the first presentation of the module are given, together with some student feedback and issues encountered, although the uptake of these assessments was not as great as hoped, the student

experience has been generally positive. In addition, the study of Dowker. A(2009) suggested that 339 children aged 6 and 7 at Oxford primary schools took part in a study of arithmetic performance on the standardized arithmetic tests was independently affected by both addition performance level and group membership (unselected children versus those with mathematical difficulties). Derived fact strategy use was affected by addition performance level. In addition, the study of Grehan. M & et al (2010) suggested that the students' mathematical backgrounds do not appear to be the only major factor in determining engagement. We found that both groups experienced similar difficulties and problems. However, the second group had several different strategies or coping mechanisms to enable them to get through. In addition, the study of Kurtz, L. A. & NetLibrary. I (2006) suggested that student with poor visual have difficulty knowing what is important or unimportant on a page, work slowly compared to peers, experience difficulty completing work such as near or far copying tasks and experience difficulty finding items in their bags or pencil case. In addition. the study of Daher. W (2009) suggested that, though most of the participants thought that mathematical problems could be solved without applets, they emphasized the role of applets as fostering, facilitating and clarifying mathematical problems' statement and solution. The participants pointed at applets as tools which learners enjoy working with, so they will be encouraged to solve mathematical problems using them.

Researcher finding that Several factors are effect on mathematical disabilities, including poor motivation, deficits in verbal ability, automaticity deficits in basic arithmetic operations, genetic predisposition, in addition, it believes to enhance the level of motivation, the development of pupils ready and guidance about learning, making education more interesting and attractive to learners with mathematics learning disabilities.

2. The level of visual perception disorder among children with mathematics learning disabilities is significant. This means, the existence of visual perception disorder among students with mathematics learning disabilities, is highly, the study of Dominic. H ffytche & et al (2010) suggested that visual perceptual disorders are often presented as a disparate group of neurological deficits with little consideration given to

the wide range of visual symptoms found in psychiatric and neurodevelopmental disease. In addition, the study of Kurtz, L. A., & NetLibrary, I.(2006) suggested that student with poor visual have difficulty knowing what is important or unimportant on a page, work slowly compared to peers, experience difficulty completing work such as near or far copying tasks and experience difficulty finding items in their bags or pencil case. In addition, the study of Dominic. H ffytche & et al (2010) suggested that visual perception symptoms such as visual hallucinations, illusions and visual perceptual distortions or symptoms more likely to be found in psychiatric or neurodevelopmental disorders are typically only mentioned in passing or not at all in such schemes.

Researcher suggested that to a condition in individuals who once mastered mathematical ability but subsequently lost it, as a result of brain injury or developmental dyscalculia, refers primarily to a failure to develop mathematical competence. Researcher confirms the importance of visual perception in the teaching and learning processes, and focus on skill-based learning, and the use of effective instructional strategies, in addition researcher point that, children with mathematics learning disabilities, during the solving of simple arithmetic problems and simple word problems, use the same types of strategies (verbal counting) as typically achieving children, but they differ in the strategy mix and in the pattern of developmental change in this mix.

3. The level of Visual discrimination disorder among children with mathematics learning disabilities, is significant. on line, Gray, S. A. & et al(2012) suggested that adolescents in the working memory training group showed greater improvements in a subset of working memory criterion measures compared with those in the math-training group, but no training effects were observed on the near or far measures. Those who showed the most improvement on the working memory training tasks at school were rated as less inattentive/hyperactive at home by parents. Results suggest that working memory training may enhance some aspects of working memory in youths with learning disabilities. In addition, the study of the study of Kurtz, L. A., & NetLibrary, I.(2006) Suggested that student with poor visual discrimination they are faced difficulty learning the alphabet and recognizing

words/letters, confusion of similar shapes, letters and numbers, mistaking words with similar beginnings or endings, trouble writing and remembering letters and tending to use other senses to make what should be visual discrimination (tactile and verbal).

Researcher suggested that, visual discrimination is one of the processes necessary to learn, where the optic discrimination disorder significantly affect the ability of students with learning difficulties on visual focus, recognize the shape and the floor, control the visual input. And it must be given to educational environments for people with learning difficulties and reduce the factors that distract children in the resource room and Improve the level of academic achievement, In this climate of high-tech software solutions for education, simple, older technologies that provide users with electronic means to make calculations, simplify and solve mathematical expressions and algebraic equations, often adaptive calculators, allow the user to focus on the conceptual and problem solving aspects of math. Technologies of this type often adaptive calculator that serve as an equalizer in mathematics education and help students to more quickly and readily develop number sense, gain mathematical insight, and reasoning skills.

4. level of auditory processing disorder among children with mathematics learning disabilities, is significant. The study of Poelmans. H & et al (2011) suggested that, group comparisons demonstrated that children with dyslexia were less sensitive than normal-reading children to slow-rate dynamic auditory processing, speech-in-noise perception, phonological awareness and literacy abilities. Correlations were found between slow-rate dynamic auditory processing and phonological awareness, and speech-in-noise perception and reading [23]. In addition, the study of The study of Kurtz, L. A., & NetLibrary, I.(2006) suggested that there are classroom strategies for student with poor visual included, Remove glare by sitting away from direct sunlight and take regular breaks to decrease visual stress, Play hidden picture games such as 'i Spy' and 'where's wally', eliminate visually stimulating table as much as possible, complete simple crosswords, change positioning of student's seating to minimize distraction from other students, use red marker to outline boundaries of the specific area to cut or color, Play Scavenger Hunt, limit competing information from the visual field and use iPad apps (Little things and doodle find) [17].

Researcher suggested that, learning difficulties arising from disorders or cognitive processes expresses or reflects itself through three basic aspects, school failure, poor academic achievement, skills and motor difficulties and failure in the integration of cognitive and motor cognitive systems. In addition, auditory perception difficulties include phonological awareness, auditory discrimination, auditory memory, arrangement or audio sequencing, mixing or audio blending.

V. CONCLUSION

This study is modern and contemporary studies because conducted about the predicting of the relationship between memory difficulties and language disorder among pupils with mathematics learning disabilities, so that to enhance the quality of education with learning disabilities, by evaluating the level of availability of programs services very important, to promote abilities and build skills for learning disabilities pupils. Which helps educators and teachers on educational planning successful, towards a better future for this category among special groups which meet the needs of pupil with learning disabilities throughout the life course, Evaluate the quality of learning disabilities programs services is very important in special education field, to improving academic achievement. Finally, the study found that, the predicting of the relationship between memory difficulties and language disorder among pupils with mathematics learning disabilities is significant, the level of memory difficulties among children with mathematics learning disabilities is above moderate and the level of language disorder among pupils with mathematics learning disabilities, is above moderate.

VI. REFERENCES

- [1] Bradley. K et al. Applying the Rasch Rating Scale Model to Gain Insights into Students' Conceptualization of Quality Mathematics Instruction, University of Kentucky, Mathematics Education Research Journal 2006, 18 (2), p.12, available on: http://ww.academia.edu/he_Rasch_Rating_Scale_Model_to
- [2] Brandstaetter. P et al. Introduction to Auditory Processing Disorders, Minnesota department of children families learning, division of special education,2003, p.4-5,83, available on: <http://www.google.com>
- [3] Brian R. Evans. Editor's Perspective Article: Supporting Students from Underrepresented Groups in Mathematics for Alternative Certification Teachers, Journal of the National Association for Alternative Certification, 2013 Pace University, JNAAC, Spring 2013, 1(8),p.17, <http://www.eric.ed.gov/?q=teacher+certification>

- [4] Colclough. C et al. The Quality Imperative: Education for All The EFA Global Monitoring Report Team, United Nations Educational, Scientific and Cultural Organization. available on: Paris, France, 2005, p.6, <http://unesdoc.unesco.org/images/0013/001373/137333e.pdf>
- [5] Daher, W. Preservice Teachers' Perceptions of Applets for Solving Mathematical Problems: Need, Difficulties and Functions. Educational Technology & Society Department of Mathematics, Al-Qasemi Academy, Baka, 2009, 12 (4):p.2,3 available on: <http://eric.ed.gov/?id=EJ860459>
- [6] Dominic. H ffytche et al. Disorders of visual perception, Department of Old Age Psychiatry, Institute of Psychiatry PO70, King's College London, De Crespigny Park, London SE5 8AF, UK. Journal of neurology, neurosurgery, and psychiatry (Impact Factor: 5.58). 11/2010, 81(11):p.2,3, available on: http://www.researchgate.net/..._Blom/publication/47534990
- [7] Dowker. A. Use of derived fact strategies by children with mathematical difficulties, department of Experimental Psychology, University of Oxford, South Parks Road, Oxford OX1 3UD, United Kingdom, Cognitive Development 24, 2009, P.401. available on: http://www.researchgate.net/.../229128217_Use_of_derived_f...
- [8] Esplin. J & Wright. C. Auditory Processing Disorder: New Zealand Review, A Report Prepared for the Ministry of Health and Ministry of Education, The University of Auckland, New Zealand, February 2014,p.27, available on: http://www.health.govt.nz/...ing_disorder_review_report.docx
- [9] Evers. T. Wisconsin's Specific Learning Disabilities (SLD) Rule: A Technical Guide for Determining the Eligibility of Students with Specific Learning Disabilities, Wisconsin Department of Public Instruction, State Superintendent, December 2013, p.,available on: <http://www.sped.dpi.wi.gov/sites/default/files/imce/.../sld-guide.pdf>
- [10] Gersten. S et al. Screening for Mathematics Difficulties in K-3 Students.. University of Oregon, Center on Instructions,2007, p17. available on: <http://files.eric.ed.gov/fulltext/ED521575.pdf>
- [11] Gibbs. G. Dimensions of quality, The Higher Education Academy, U.K, the higher education academy, septemper,2010, p.11. available on: <http://www.sparqs.ac.uk/ /E4%20Dimensions%20of%20Qual>.
- [12] Gooding. S (2009) Children's Difficulties with Mathematical Word Problems. University of Cambridge, UK, Proceedings of the British Society for Research into Learning Mathematics, November Joubert, M. (Ed.) 2009, 29(3): p31,32, available on: <http://www.bsrlm.org.uk/IPs/ip29-3/BSRLM-IP-29-3-Full.pdf>
- [13] Gray. S. A et al. Effects of a Computerized Working Memory Training Program on Working Memory, Attention, and Academics in Adolescents with Severe LD and Comorbid ADHD: A Randomized Controlled Trial, Journal of Child Psychology and Psychiatry, Dec 2012, 53(12): p1277-1284, <http://vidensportal.socialstyrelsen.dk/ /Opmaerksomhedsforst>
- [14] Grehan. M et al. How do students deal with difficulties in mathematics? Department of Mathematics, National University of Ireland Maynooth, CETL-MSOR Conference 2010, available on: <http://eprints.maynoothuniversity.ie/... /CM-Student-Difficulties...>
- [15] Hulme. C. & Snowling. M. Developmental disorders of language learning and cognition. Wiley-Blackwell, UK,2009, available on: <http://www.wiley.com/...WileyTitle/productCd-0631206116.htm>
- [16] Jay R. Lucker. Auditory Processing: What is it Like to Have an Auditory Processing Disorder? Dept of Communication Sciences & Disorders, Howard University-Washington, DC December 2012, available on: http://www.ncapd.org/uploads/APD_simulation_aug_2012.pdf
- [17] Jordan. c. Nancy et al. Early math matters: Kindergarten number competence and later mathematics outcomes. Developmental Psychology, 2009, 45(3), 850-867. available on: <http://www.ncbi.nlm.nih.gov>
- [18] Kurtz. A. ,& NetLibrary. I. Visual perception problems in children with AD/HD, autism, and other learning disabilities: guide for parents and professionals. London: Jessica Kingsley,2006, available on: http://www.sydney.edu.au/.../Visual_Discrimination_FactSheet.pdf
- [19] Lowe. T & Hasson. R. Assessment for learning: Using Moodle quizzes in mathematics, Department of Mathematics and Statistics, University of Birmingham, CETL-MSOR Conference 6-7 September 2010, P39. Available on: http://www.mathstore.ac.uk/repository/CETL-MSOR_Pr
- [20] Ní Fhloinn. E. DCU Voluntary Maths Tuition Programme Maths Learning Centre, School of Mathematical Sciences, Dublin DCU Voluntary Maths Tuition Programme, City University, CETL-MSOR Conference,2010, P57. available on: <http://www.dcu.ie/maths/people/eabhnaat-nifhloinn.shtml>
- [21] Poelmans, Hanne. et al. Reduced Sensitivity to Slow-Rate Dynamic Auditory Information in Children with Dyslexia, Research in Developmental Disabilities: A Multidisciplinary Journal, Nov-Dec 2011, 32(2): p.2810-2819.available on: https://perswww.kuleuven.be/.../Boets_PublicationList_2...
- [22] Rachel E. Pepper et al. Observations on student difficulties with mathematics in upper-division electricity and magnetism. Science Education Initiative and Department of Physics, University of Colorado, Boulder, Colorado 80309, USA, 27 March 2012, p.1, available on: <http://www.colorado.edu/physics/EducationIssues/.../Student>
- [23] Tang. Q. Challenge in Basic Mathematics Education. United Nations Educational, Scienti_ c and Cultural Organization,2012, p.4,5, available on: <http://unesdoc.unesco.org/images/0019/001917/191776e.pdf>
- [24] Wai Lan. C. Winnie. Mathematics Difficulties: Understanding and Identification Department of Psychology, HKU, 23 Nov 2012, available on: <http://www.edb.gov.hk/attachment/tc/edu-system/.../23d.pdf>