Investigating the Perceptions of Pakistani Teachers Regarding the Academic Performance of Dyslexic Primary Level Students in the Mainstream Classrooms

* Qurratulain Ershad, Lecturer (Corresponding Author)
** Maria Shiraz, Assistant Professor
*** Mazna Toosy, Lecturer

Abstract

Inclusive education requires that education be delivered in a framework that is broad enough to accommodate equally the needs and the requirements of every learner in the society. This includes learners with disabilities like dyslexia who find difficulties in coping in the mainstream classrooms. This study explores the perceptions of the teachers regarding the academic performance of dyslexic students. A qualitative methodology was used and the sample was purposively selected comprising of seven teachers who were involved in teaching dyslexic students. Semi-structured interviews were conducted to determine their perceptions and the challenges that they encounter during the teaching-learning process. The main findings revealed that teacher awareness of dyslexia, teacher training, effective classroom instructions, and educational interventions can help dyslexic students cope in the mainstream classrooms.

Keywords: Inclusive, Dyslexia, Mainstream Classroom

Introduction

In Pakistan, with the increase in student population, the school has converted into a more differentiated and culturally diverse space (Sónia, 2012). These educational institutions are expected to accommodate the needs of all the children who represent the different sectors of the society and include learners from diverse backgrounds, with varied interests, needs, potentials, and learning styles (Krzyżak, 2006). Therefore, the population in schools is now to a great extent heterogeneous as well as complex (César 2000; Vieira, 2014). Hence, to make schools conducive for everyone it is necessary to attend to the challenges that we face from what is documented to what we experience practically (Sónia, 2012).

In schools, some students are unable to reach the expectations that are required of them. Such types of students are termed as lazy and their respective institutions conclude that it is not possible to teach them. A lot of these students may have problems in processing the information, or else in writing and reading (Krzyżak, 2006). In Pakistan, it is a common practice to label all such learning problems under the term 'dyslexia'. Despite the apparent contradiction, it is also not unusual for students having slight learning difficulties to be regarded as having dyslexia (Riga, 2012).

Dyslexia may be defined as a particular learning disability whose origin is neurological. It is a lifetime developmental disorder that affects a child’s learning ability. One out of five children maybe dyslexic (International Dyslexia Association, 2002). Dyslexia is a complex state to understand since it does not have any observable symptoms. Children, who have problems in fluent word recognition, are weak in spellings, and have poor decoding abilities fall under the category of dyslexia. These problems are typically an outcome from a problem in the phonological section of language that is often not expected with regards to other cognitive abilities and the provision of effective classroom instruction.

One of the most important skills that are developed in school is the ability to read. Children and adults who have dyslexia have unusual difficulty reading. Although such students may have the level of aptitude which is considered as adequate intelligence yet, they may not academically achieve as well as other children of their age (Chivers, 2001). Such individuals, however, have the motivation, intelligence, and schooling recognized as important for correct and fluent reading (Shaywitz.
Investigating the Perceptions of Pakistani Teachers Regarding ..........Ershad, Shiraz & Toosy

Shaywitz, Pugh, Fullbright, Constable, Mencl, Shankweiler, Liberman, Skudlarski, Fletcher, Katz, Marchione, Lacadie, Gatenby, & Gore, 1998). Furthermore, Griffith and Steffert (1999) have pointed out that individuals with dyslexia possess creative abilities and this fact is revealed as many dyslexic students are studying courses of arts and designs at a higher level.

According to Thompson, Leong, and Goswami (2013) to support persons with dyslexia it is necessary to make early identification so that suitable intervention techniques as well as appropriate teaching methods can be adopted. This will promote a positive attitude towards the learning process resulting in individuals who are self-reliant and responsible contributors to society.

Basu, Poonam, and Beniwal (2014) have shared two essential principles of a mainstream school. The first is to believe in the educability of every individual and the second is to trust the abilities of teachers and educationalists to support the maximum development of their students. Hence, the model of mainstream schooling is very extensive since it concerns itself with the uniqueness and individuality of every student (César, 2000).

According to Aronin and Floyd (2013), both teachers and parents should be given the knowledge and training to deal with students with dyslexia. Furthermore, Tilly and Jane (2016), states that parents and educationists need to be aware of how to handle students with dyslexia. For dyslexic students to perform well in schools, it is essential to identify and determine the extent of dyslexia that they have (Association of International Dyslexia, 2009). According to Power, Eicher, Butter, Kong, Miller, Ring, Mann, and Gruen (2013), trained professionals should design effective programs based on needs analysis. Moreover, there is a dire need to train teachers regarding the various aspects of dyslexia (Chista & Mpofu, 2016). Effective teaching methods should employ to impart knowledge to dyslexic students (Ahmed, 2018). Research conducted by Kooij (2013), emphasized the use of individualized instruction to enable dyslexic to work at their respective pace.

In Pakistan, according to Khalid and Anjum (2019), the rate of dyslexia among children is 15–20% which indicates that about 12 million children need assistance. Although the Pakistani government has introduced and encouraged mainstream classrooms in its educational policies, for example, the National Education Policy (2009) advocates child-friendly as well as inclusive education (Khan et al., 2017) yet, there is a need to explore the teachers’ perceptions towards this concept. Hodkinson (2006) agrees to the fact that teachers’ teaching programs could affect their perceptions and support for mainstream classrooms, and therefore, it is necessary to investigate the experiences of teachers concerning the teaching and facilitation of students with dyslexia. The current study is designed to investigate teachers’ perceptions towards the academic performance of dyslexic primary level students in the mainstream classrooms within the Pakistani context.

Research Objectives
The objectives of the research were to:
1. investigate the perceptions of the Pakistani teachers about the academic performance of dyslexic students.
2. identify the problems faced by the Pakistani teachers while teaching dyslexic students in the mainstream classrooms.
3. identify the strategies employed by the teachers to cater to the requirement of dyslexic students.

Research Questions
1. What are the perceptions of the Pakistani teachers about the academic performance of dyslexic students?
2. What are the problems faced by the Pakistani teachers while teaching dyslexic students in the mainstream classrooms?
3. What are the different strategies employed by the teachers to cater to the requirement of dyslexic students?

Method
The present study employed qualitative research based on the interpretivist/constructivist paradigm and aimed to understand what teachers feel and how they react towards students with dyslexia. This study made use of primary data hence, the main research tool utilized was the semi-structured interview.
Participants
The data were collected from seven teachers who were personally interviewed by the researcher. These teachers were selected through the use of ‘purposive sampling’ which is a sampling strategy "based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (Merriam, 2009. P 77). Dr Amina, a psychiatrist working in a government hospital helped in providing information about dyslexic students, and through these students, the researcher was able to identify and approach their teachers.

Research Instrument
The interview schedule for the semi-structured interviews comprised of twenty-six questions and was based on four main topics: knowledge and beliefs about dyslexia, classroom practice, student difficulties, and school policies. Questions 1-5 inquired about teacher demographics such as age, gender, education, and duration of teaching primary grade students. Questions 6-9 inquired about specific difficulties i.e. dyslexia and possible interventions. Question 10-17 were based on the mode of instruction, aids, problems, and specific strategies employed by them. Questions 18-24 were based on the difficulties faced by the dyslexic students and methodology. The final two questions were concerned with curriculum and methodology used for error correction.

Procedure of Data Collection
The seven participants in the study were primary school teachers from three private schools. They all had a bachelor's degree and had more than three years of teaching experience. Five of the teachers also had a Master in English Language. Most of the students in the private schools are from middle-class families whereas in government schools the students belong to low-income families. All schools were in the central city having purpose-built buildings. The participants were assured that their responses would remain confidential. The duration of each interview was thirty minutes. These interviews were recorded and later transcribed by the researcher. Trustworthiness is defined as the degree of confidence in data, its interpretation, and methods employed to ensure the quality of a study (Pilot & Beck, 2014). According to Guba and Lincoln (1994), the trustworthiness of a study can be established in terms of the study's credibility, dependability, confirmability, transferability, and authenticity. To ensure the credibility of this research study, member checking was conducted as the transcribed interview data was sent back to the respective participant teachers to check for accuracy and authentication.

Data Analysis
The interviews of the participants were audio-recorded and later transcribed. The transcribed data was then thoroughly reviewed, coded and a thematic analysis was conducted. The verbatim quotes of the participants were used to exemplify certain themes.

Discussion of Findings
Teachers’ Awareness of Dyslexia
In the interviews conducted with all the teachers, a recurring theme was their lack of information and knowledge about how to help the dyslexic students. Out of seven teachers, four teachers found it challenging to define dyslexia and were not sure about what this particular disorder was about. They believed that they needed someone to guide them so that they could be able to identify dyslexia. Unfortunately, their school had neither sent their staff to attend seminars nor had they arranged any seminars on dyslexia.

“We need to be informed with examples from written work.”
“No knowledge if such seminars are organized in Lahore or even in the country.”

They were also worried about being able to give the dyslexic students a fair test and teach according to the demands of their problem for example Teacher A said that she would like to adopt new techniques and dyslexia-friendly strategies with her students if she was properly trained for it.

“If the guidelines are provided to us, the method may have been interesting and it can be used with the rest of the students as well but unfortunately I am not aware of………”

She was not sure how her students could be motivated or how to bring new concepts home to them she could not include them in the lesson. She attributed this to the insufficient training program for the in-service teachers.

“but if I don’t know how my students could be motivated more and what can make them understand what I am saying.”
Investigating the Perceptions of Pakistani Teachers Regarding ………..Ershad, Shiraz & Toosy

**Teacher B** in her interview said that once she had a chance to attend a seminar but the seminar was too theoretical rather than practical.

"and the seminars, unfortunately, appear to be more theoretical and with no practical utility.

Being an English teacher I am more interested in the strategies which can help these students in overcoming their problem to the maximum."

Teacher B further said that there were advisors in the school but had they had never informed her about the special needs of these students. The teachers had never been made aware of the presence of dyslexic students in their class by the administrators and neither had these dyslexics requested any special attention or intervention.

On the other hand, **Teacher C** found out about the learning styles of students or types on her own. This teacher had gained knowledge through articles on dyslexia and because of his interest. She found out through observations or monitoring based on cues like "they are slow, they feel inferior, shy, make mistakes even if the matter is clear." "This type of student is very different from others (poor reading ability etc.) and it's not getting better." She also reiterated that neither the administration nor the parents told her about the needs and problems of the students.

**Teacher’s knowledge and training**

The teachers expressed their desire to be trained on issues regarding dyslexia issues and no relevant training was given to them at the college or university level. Training is essential as it affects the support which teachers can offer to students with dyslexia. The teachers lacked having adequate information regarding dyslexia or how to teach dyslexic students. This finding is similar to the findings found in Constantopoulou’s (2002), Arapogianni’s (2003), and Lapps' (1997) research studies which also investigated this issue looking at the perspective of teachers only. They also found that there was a lack of knowledge among Greek teachers regarding dyslexia.

**Problems faced by dyslexic students**

According to the teachers, dyslexic students needed more time to complete their assigned work. Such students easily mixed up similar letters or numbers like (b) and (d), (6) and (9) and also had difficulties reading, writing, and acquiring new words and spellings. These teachers were primarily concerned with the results or consequences of the disorder. They believed that the main point of concern about dyslexic students was that despite their efforts to perform well in class they were not able to achieve the objectives of the assigned topic/ subject. “There is no improvement” as described by Teacher B.

The teachers were able to provide various examples of the problems faced by their students. When they were asked to explain in detail the writing difficulties faced by the students all the teachers were of a similar view that these students were not able to structure their sentences correctly. The dyslexic students, for instance, found it difficult and challenging in starting a sentence as well as in ending it appropriately. Most of the time the placement of words in the sentence was incorrect. The teachers also noted a greater likelihood among dyslexic students to spell words incorrectly by either missing the silent letters or writing the letters in the wrong order.

When the teachers were asked to share their opinion regarding the study skills of students with dyslexia, the teachers did not notice any difference between a student with and without dyslexia; however, Teacher C believed that dyslexic students tended to be less organized. She had also noticed that they usually forgot to bring required materials to school, often did not submit homework on time, and would often misplace copies and books. Dyslexia and the poor study skills were described by the teacher C and D as:

"Dyslexia and the poor study skills go hand in hand. They are often forgetful. One can feel that the problem you find in their writing is present somewhere else as well, in their minds may be and can be seen in other things as well like they forget to bring their books."

All the teachers noticed that most of the dyslexic students have messier handwriting but they believed that they had better verbal skills. They also noticed that their dyslexic students’ needed more time to think about what they were going to say.

The teachers agreed that they should use different methods to work with dyslexic students as compared to their non-dyslexic students. Except for Teacher C, the rest of the teachers found it difficult to figure out the best way to help these dyslexic students and often wondered what to work on first to help them to enhance their academic performance.
Investigating the Perceptions of Pakistani Teachers Regarding ...........Ershad, Shiraz & Toosy

Mode of instruction and strategies employed by the teachers

a. Differentiation of methods and materials

Differentiated teaching pertains to teachers' knowledge of dyslexia. Differentiation does not mean to make the assigned tasks and the tests given in the class more accessible for the dyslexic students but to make a more effective and relevant assessment for them (Reid, 2007). Differentiation enables pupils to demonstrate what they can achieve and experience satisfaction in their learning (Crombie 2000).

The teachers said that they encountered challenges in differentiating their methodology for the dyslexic students because of the lack of knowledge about this disorder. Teachers can differentiate their teaching methodologies for dyslexic students by acquiring knowledge and training on dyslexia. The teachers did not use a different method for their students because they did not know their needs. They also mentioned that it was difficult to use different pedagogic methods for their students because they did not have the requisite knowledge and also found it difficult to find relevant material for their students because they did not have sufficient information to do so. Another problem faced by them was the lack of teaching materials that would help them in achieving the objectives of her teaching. One of the criteria of dyslexia-friendly practice is the availability of appropriate and relevant materials, according to Mackay (2004) and Hunter-Carsch (2004).

However, Teacher C said that she used different methods or differentiated her materials for her students "J.M" and "S.C" and the other weak students in her class but at the same time voiced her concern that she might not be using the appropriate method for students with dyslexia. "I am confident but I do not know what problem exactly they are facing. I am not using the appropriate method for them. Moreover, I cannot have a special method for them in class and another method for the rest of the class."

b. Multi-sensory Techniques

According to the International Dyslexia Association (IDA), multisensory teaching is an effective approach to teaching children with dyslexia. It employs the use of two or more senses for learning purposes. Despite not being familiar with the term "multi-sensory techniques", it appeared that Teacher A, B, and D were unintentionally using them with their students for example they said that these children loved to do multiple choice questions and they scored well on them while Teacher C said that she was using a variety of techniques like making the students highlight the definitions, drawing pictures, mind maps, graphic organizers, etc.

c. Strategies employed by the teachers

Teachers sometimes created their strategies based according to the needs of their dyslexic students' For instance teachers A, B and C gave their students extra time especially during exams, read the instructions to the students during exams, and sometimes even changed the written assignment to an oral assignment. The strategies employed by Teacher A and D were that they made both of their dyslexic as well as non-dyslexic students work together. All of the teachers believed that they needed the support of how to facilitate their students of dyslexia to the maximum.

All the teachers were of the view that dyslexic students could not attain the goals like non-dyslexic students. They thought that their disability would not hold them back from obtaining language proficiency of the same level as their other non-dyslexic students.

Teacher A who believed that we should not see dyslexia as a hindrance, explained "I do not believe that it is a disadvantage as such it may be one if you are presenting it as such but if you do not deal the students alike, ‘oh! No, the poor child has got this or that, it will be an issue. It is something you need to learn to cope with as long as you know about it, not a problem but as another way to acquire knowledge.”

Teacher B, C, and D felt that her dyslexic students may not be able to perform academically well as they can't acquire language like non-dyslexic students

The teacher D said

“I still believe that language learning helps to broaden one’s mind and same is true for a student with dyslexia as it provides them the opportunity to gain more general knowledge, to know about other cultures and that they are unable to spell the words correctly; it is not the end of the world. It has been enhancing their knowledge.”
Assessment Challenges
Assessment was the most frustrating challenge for all the teachers as they were not sure how to mark their dyslexic students without being unfair to the rest of the students. They also found it difficult to assess their dyslexic students’ work in the same manner as they assessed the other students of their class. All the teachers reported that there was no alternate way of testing dyslexic students. They had to take written tests just like their non-dyslexic counterparts. Not only this, but teachers also felt that they had no freedom to change tests to better fit the strength and weaknesses of their dyslexic students.

Teachers A and D voiced their frustration about assessing students with dyslexia in a different way as compared to the non-dyslexic students.

“You have to think about the other weak students too, who are also struggling in the class and you must think of them as well.”

However, Arapogianni (2003) in her study used an oral examination technique for dyslexic students and no problem was reported.

The Examination of Spelling
All the teachers complained that there was no such school policy on how to mark the spelling of these students. The teachers also agreed that dyslexic students often found it difficult to read but they could not explain why dyslexic students found it difficult. They, as mentioned by Schneider, Roth & Ennemoser (2000) in their studies, were due to the lack of the underpinning theory of this disorder. Then the question arises; Is this essential? Is it necessary that teachers know the reasons behind the students’ inability to recall the correct spelling of a word? Is it enough that a teacher can pinpoint the symptoms of dyslexia when their student is consistently using [b] in place of [d]? The answer is yes to some extent. By being able to identify the disorder, the student has a better opportunity of getting the special support he/she requires, whether it comes either from the teacher or the school’s administration. It is, however, also important that a teacher should not only be able to identify the symptoms but also know how to tackle with them. As stated by Arries (1999) in his article, the teacher must be able to pinpoint the strength and weaknesses of dyslexic students to find and use appropriate teaching methods. This becomes quite challenging when the teacher does not know the reason why a student, for instance, find it difficult to read familiar words in the books. If they do not know that this problem is common among dyslexic students, lack of phonemic awareness could be the possible reason for it, they may not be aware that this student needs special help hearing, saying, and writing the letters of the particular language. By being aware of what dyslexia is; not just able to identify its symptoms but also knowing the theories surrounding dyslexia this particular disability, teachers will be well equipped to guide and help the dyslexic students.

Extra time for academic work
Dyslexic students need more time to complete the assigned work in class as well as at home. The teachers said that they could only partially meet the objective of the lesson because of its short duration and the number of students in class. This finding is similar to that reported by pupils and parents in the study conducted by Lappas (1997) on dyslexic students in which the strength of the class and the little time given to individual pupils were seen as factors leading to weak support from the teachers in the mainstream classroom.

The teachers were of the view that extended time should be given to these students, especially during exams. Nijakowska (2000) and Arapogianni (2003) also reported that the technique of giving extra time was used by the teachers in their study to support and guide the dyslexic students to achieve their assigned task.

One of the teachers reported that she tried to be lenient to the dyslexic students for not doing their assigned work and gave some more time to complete their classwork but she could not differentiate it clearly for them as there was no school policy. Pupils with disabilities and parents in Lappa’s study (1997) also complained about the quantity of homework and time.

Difficulties Faced by the Teachers
The problems that were faced by the teachers who were interviewed could be classified into two categories: didactic and administrative. The didactic problems are associated with the actual classroom assigned tasks whereas administrative problems deal with the school administration issues.
a. Didactic Problems

It could be deduced from the response of the interviewees that a sense of frustration was experienced by the teachers while dealing with dyslexic students. It can be said that this sense of frustration was because they lacked sufficient knowledge towards dyslexia and next how to help their students cope with it and not from the teachers' reluctance to teach a student with dyslexia. The teachers felt apprehensive about where to start from when teaching a student with dyslexia. They wondered whether they should focus more on the oral part of a language or to begin with the written aspect. They also were not sure what strategies to be employed when the students seemed not to understand a concept even though it has already been explained to them a couple of times. The teachers appear to be not sure of how to support their students of dyslexia as the tactics they employed in their classes have been proved to be quite effective for them but they seem to be of little help for their students and even did not prove too effective in developing the required knowledge of language amongst the dyslexic students. In a nutshell, their dyslexic students were not showing progress in the same manner as the other students.

The school curriculum that has not been designed according to the needs of the dyslexic students was the reason behind the students' struggle in the mainstream classroom. The teacher can help her dyslexic students and make learning easier and more possible for them by employing various types of methods in their classroom. It looks like as although the instructors who had employed different strategies in their teaching for their students of dyslexia felt quite comfortable and less irritated while teaching and help their students cope with the disorder. If so, can it be concluded that such students showed improvements in their class and one of the reasons could be the less frustration experienced by the teachers? This could be the case since the teachers who were not aware of what to do and what teaching methodology to adopt with such students resultantly felt more irritated due to the inability of their students to show the required level of progression in the class. By all means, this variance could be the result of every teacher's teaching techniques, personality, and opinion about what improvement encompasses. There is a need to carry out more comprehensive research to make a vivid connection between the students' progress in the classroom and the feelings of frustration felt by the teachers. However, there seems to be a relationship present amongst teachers who employ alternative means to help their dyslexic students and resultantly the general feelings of the teachers towards this particular disorder.

b. Problems at the Administrative Level

Many of the interviewed teachers believed that their insufficient knowledge of the particular subject of "Learning Disabilities" could be one of the reasons behind the confusion on how to cater to the needs of dyslexic students. The teachers shared the fact that the school administration did not arrange for any such need based trainings. As the number of pupils having various types of learning disorders such as dyslexia is likely to rise every year, the teachers shared their apprehensions that they were not equipped with the appropriate and latest educational tools to cater to the needs of dyslexic students effectively and efficiently. It can be proclaimed that the irritation experienced by the teachers while working with students of dyslexia was because of the teachers' need for specific training programs, workshops, and courses related to learning and dyslexia, and in reality, they were not provided with it. Despite this, the work of dyslexic students was assessed by their teachers according to the recommended marking criteria set by the administration and at the same time keeping the disability of the students in mind. The teachers in their interviews questioned their doubts: is it righteous to mark a student with a diagnosed disability and a student without disorder on the same scale? This appeared to be a challenging task for many of the teachers since they found it extremely unfair to use the same marking standards for both dyslexic and non-dyslexic students.

Thus, the teachers feel quite uncertain when they have to assess and grade dyslexic students which is problematic for the teacher as well as for the students. It is, therefore, important for teachers to know their limitations - what they are allowed to do and what not - so that they can develop appropriate assessments for their students. Firstly, this will benefit the dyslexic student as they perform better on tests and quizzes when they know what is expected from them and are familiar with the assessment format. Secondly, it will also benefit the teacher since the teacher will be aware of how to test and assess their students with dyslexia. Hence, they can plan and develop appropriate tests to accurately test and assess their knowledge. Lastly, the interviewed teachers mentioned the insufficient time which hinders the implementation of the required strategies and methodologies specially
designed for their dyslexic students. In their view, it was the administration that did not provide ample time to the teachers to help such students to perform to their maximum capability.

**Conclusion**

This qualitative study investigated the perceptions of teachers about the academic performance of dyslexic students in mainstream classrooms. The main findings revealed the following: there was a lack of teacher awareness, knowledge, and training about dyslexia; students faced various problems such as writing difficulties, incorrect spellings, structuring of sentences; the mode of instruction and strategies employed by the teachers were deemed insufficient to address the real concerns of the students; teachers struggled with issues regarding assessment and time management and teachers faced difficulties at both didactic and administrative level. The findings of the present research are in line with the findings of the study conducted by Rebecca Elias (2014) that depicted that teachers in New Zealand deal with dyslexic students positively and help them in overcoming their learning difficulties.

What helps dyslexic learners enhance their academic performance in primary school appears to be the subtle interplay of strategy development, understanding, and motivation, supported by their readiness to work hard. Students understanding of strategies cannot be assumed; explicit teaching equips dyslexic learners with the tools to aid literacy progress. Although the research literature shows that several didactic tactics have proved to be useful yet the teachers are not found applying them. It can be assumed that the reason teachers do not employ more didactic based tactics while dealing with dyslexic students is because: (1) they do not have adequate time (2) lack of information about dyslexia to be able to use didactic strategies. As aforementioned, teachers feel they do not have sufficient time to employ different ways with their students with dyslexia since they have more than 25 other students in their class and maybe this could be the reason they have chosen to use assessment strategies so that somehow they could still help their dyslexic student yet not take additional time away from their non-dyslexic students. Another reason why teachers do not use more didactic based strategies is because they simply are not aware of what these strategies are and/or how to employ them in their classroom. They need to be provided the necessary training to help dyslexic children reach their maximum academic potential in their mainstream classrooms, thus fulfilling the aims of providing an inclusive education.

**References**

Ahmed, A. (2018). Perceptions of using assistive technology for students with disabilities in the classroom. *International Journal of Special Education, 33*, 129-139.

Arapogianni, A. (2003). Investigating the Approaches that Teachers in Greece Use to Meet the Needs of Children with Dyslexia in Secondary Schools. Unpublished MA thesis, University of Birmingham, Birmingham.

Aronin, S., & Floyd, K. K. (2013). Using an iPad in inclusive preschool classrooms to introduce STEM concepts. *Teaching Exceptional Children, 45*, 34–39. doi:10.1177/00400599130450040

Arries, J. (1999). Learning Disabilities and Foreign Languages: A Curriculum Approach to the Design of Inclusive Courses. *Modern Language Journal, 83*(1), 89-110.

Basu, S., Poonam, C., & Beniwal, A. (2014). A Study to find the perceptions of teachers towards children with dyslexia. *Learning Community- An International Journal of Educational and Social Development, 5*(1), 51–61. Retrieved from https://doi.org/10.5958/2231-45X.2014.00470.9

César, M. (2000). *Social interactions and understanding of mathematical knowledge: contextualized research*. In JP Fonte and L. Serrazina (eds.), Mathematics Education in Portugal, Spain and Italy - Proceedings of the Summer School in Mathematics Education-1999 (pp. 5-46). Lisbon: SPCE - Mathematics Education Section.

Chista, B., & Mpofu, J. (September, 2016). IOSR Journal of Research & Method in Education (IOSR-JRME) 5(1), 64-75.

Crombie, M. (2002) Specific Learning Difficulties (Dyslexia). *Belford: Ann Arbor Publications, 27-47.*

Constantopoulou, X. (2002) Educational Policy and Practice for Dyslexia Pupils: The Greek Case. Athens: Educational Issues Publishers.
Investigating the Perceptions of Pakistani Teachers Regarding ............Ershad, Shiraz & Toosy

Griffiths, Y., & Stuart, M. (2013). Reviewing evidence-based practice for pupils with dyslexia and literacy difficulties. Journal of Research in Reading, 36(1), 96–116. Retrieved from https://doi.org/10.1111/j.1467-9817.2011.01495.x

Government of Pakistan. (2009). The National Education Policy, Islamabad: Ministry of Education.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), The handbook of qualitative research (pp. 105–117). Thousand Oaks, CA: Sage.

Hodkinson, A. J. (2006). Conceptions and misconceptions of inclusive education - one year on: A critical analysis of Newly Qualified Teachers' knowledge and understanding of inclusion. Research in Education, 76, 43-55. and Tertiary Education, pp. 12–37. London: Whurr.

International Dyslexia Association. (2002). Definition of dyslexia. Baltimore, MD: International Dyslexia Association.

International Dyslexia Association (2009). Just the Facts: Recommended reading for Parents, 1-2. Retrieved October 1, 2014, from IDA website, www.interdys.org

Khalid, M., & Anjum, G. (2019). Use of remedial teaching approaches for dyslexic students: Experiences of remedial teachers working in urban Pakistan. Cogent Psychology, 6(1), 1–18. doi:10.1080/23311908.2019.1580181 [Taylor & Francis Online]

Kooij, J. J. Sandra (2013). Adult ADHD diagnostic assessment and treatment (3rd ed.). London: Springer. p. 83.

Krzyzak, A. (2006). Dyslexia in the language classroom: Practical guidelines for teachers, The Internet TESOL Journal, XII (1), January.

Lappas, N. (1997). Specific Learning Difficulties in Scotland and Greece: Perceptions and Provision. Unpublished Ph.D. thesis, University of Stirling, Stirling.

Mackay, N. (2004) The case for dyslexia-friendly schools. In G. Reid and A. Fawcett (eds), Dyslexia in Context: Research, Policy and Practice, pp. 223–236. London: Whurr. tice, pp. 223–236. London: Whurr.

Nijakowska, J. (2000). Dyslexia - Does it mean anything to a foreign language teacher? In L. Peer. and G. Reid. (Eds.), Multilingualism, Literacy, and Dyslexia: A Challenge for Educators. London: David Fulton Publishers Ltd.

Powers, N. R., Eicher, J. D., Butter, F., Kong, Y., Miller, L. L., Ring, S., Mann, M., & Gruen, J. R. (2013). Alleles of a polymorphic ETV6 binding site in DCDC2 confer risk of reading and language impairment. American Journal of Human Genetics, 93(1), 19–28. https://doi.org/10.1016/j.ajhg.2013.05.008.

Reid, G. (2007) Dyslexia (2nd Ed). Continuum International Publishing Group. Ritchie, J. and Lewis, J. (2003) Qualitative Research Practice: A Guide for Social Science Students and Researchers. London: Sage, 30-56

Rebecca Elias, (2014). Dyslexic Learners: An Investigation into the Attitudes and Knowledge of Secondary School Teachers in New Zealand.
http://www.dyslexiafoundation.org.nz/dyslexia_advocacy/pdfs/re_dissertation_2014.pdf (Retrieved on August 8, 2017

Riga, M. (2012). Teacher beliefs about teaching children with dyslexia/learning difficulties in mainstream primary schools in Greece. Unpublished Ph.D. dissertation. University of Manchester, School of Education.

Schneider W., Roth E., & Ennemoser M. (2000). Training phonological skills and letter knowledge in children at risk for dyslexia: A comparison of three kindergarten intervention programs. Journal of Educational Psychology, 92, 284–295. https://doi.org/10.1037//0022-O663.92.2.B4

Shaywitz, S. E., Shaywitz, B. A., Pugh, K. R., Fulbright, R. K., Constable, R. T., Mencl, W. E., Shankweiler, D. P., Liberman, A. M., Skudlarski, P., Fletcher, J. M., Katz, L., Marchione, K. E., Lacadie, C., Gatenby, C., & Gore, J. C. (1998). Functional disruption in the organization
of the brain for reading in dyslexia. *Proceedings of the National Academy of Sciences, USA*, 95, 2636–2641.

Sónia, L. (2012). Dyslexia through the eyes of primary school teachers. *Procedia - Social and Behavioral Sciences*, 69, 41-46.

Tilly, M. & Jane., D. (2008). *Dyslexia-friendly practice in the secondary classroom*. Sage Books.

Thomson, J. M., Leong, V., & Goswami, U. (2013). Auditory processing interventions and developmental dyslexia: a comparison of phonemic and rhythmic approaches. *Reading and Writing*, 26(2), 139–161. Retrieved from https://doi.org/10.1007/s11145-012-9359-6.

Vieira, R. (2014). Life stories, cultural métissage, and personal identities. *SAGE Open* 4(1): 2158244013517241.