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COGNIZANCE OF LEARNERS WITH VISION IMPAIRMENT REGARDING THE QUALITY OF EDUCATION IN SPECIAL EDUCATION INSTITUTES OF THE DISTRICT FAISALABAD

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Cognizance of Learners with Vision Impairment regarding the Quality of Education in Special Education Institutes of the District Faisalabad

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Abstract

The study explored the perceptions of learners with vision impairment about the quality of education in special education schools of the district Faisalabad. The type of study design that was employed was descriptive. The study population included all students with visual impairments in government special education institutions in the Faisalabad district. Only 60 learners with vision impairment enrolled in the government special education institutions in the Faisalabad district was taken as the sample of the study. Convenient sampling technique was used to select the sample of the study. The instrument of the study involves the selection and development of suitable research tools for data collection. In the present study, a questionnaire containing 25 questions with the five Likert scale. The validity of the instrument was performed by the 3 experts in the

field of special education. The instrument's reliability was examined. The research instrument's test-retest reliability on Cronbach alpha was 0.82, indicating statistical significance. A self-developed questionnaire was used to gather data for this investigation. The researchers visited the special educational institutes to collect data from the students. Descriptive statistics was run to reach the conclusions of the study. The results of the study expressed that most of the respondents (M=3.87, S.D=1.033) were satisfied with the teaching method used to teach the learners with vision loss. The respondents (M=3.73, S.D=1.326) showed positive inclination towards the provision of Braille books and accessible reading material, proper use of audio visual aids were favored by most of the respondents (M=3.55, S.D=1.111). It was inferred that majority of the respondents (M=4.00, S.D=1.221) viewed that classroom environment was good and



properly cleaned, furniture was appropriate and electricity was also available. Most of the respondents (M=3.55, S.D=1.320) viewed that curriculum was very supportive in achieving the learning outcomes. It was concluded that the learners with visual impairment were moderately satisfied with the instructional methods, classroom environment and quality of curriculum. The study was very effective in highlighting the pitfalls hindering the quality of education in terms of teaching methods, learning environment and quality of curriculum for the learners with vision loss.

Key Words: Perceptions, students, visual impairment, quality of education, special education.

Introduction

The term "visual impairment" refers to various perceptual losses. A few of the many aspects of visual function include depth of perception (the area that may be perceived), color vision, light adaptation, visual acuity, and accommodation (the ability to focus). As a result, there are numerous origins, manifestations, and intensities of visual impairment. World Organization Health known as (WHO) uses recognized methodologies (such as the Snellen chart) to evaluate a person's ability to perceive fine detail, or visual acuity, to determine the degree of visual impairment. As a result, after receiving corrections in both eyes, a person is categorized as having low vision if their visual acuity is less than 6/18 to 3/60, and as blind if it is less than 3/60. If their visual field is noticeably reduced, a person may also be classed as having a visual impairment if their acuity is higher. It is commonly known that medical assessments of visual impairment (based on clinical evaluations of visual function) for children who retain residual vision do not accurately reflect the child's ability to use their vision for functional tasks, or functional vision. Therefore, in terms of education, a functional evaluation of vision the degree to which an individual can use vision to accomplish tasks- is required to perform an assessment. Typically, a thorough functional visual examination is conducted (Douglas & McLinden, 2004).

Based on the best available data from recent studies, estimates of the prevalence of vision impairment and its causes in 2002 have been reported. In 2002, there were about 161 million individuals with vision impairment globally, of which approximately 37 million were blind. Globally, the burden of vision impairment is not evenly spread; the least developed areas bear the lion's share of this burden. Additionally, there is an uneven distribution of visual impairment throughout age groups; it is primarily found in people 50 years of old and above. Across the globe, there is a gender distribution



disparity as well: women are much more likely than men to experience visual impairment. Except for the most developed nations, cataract continues to be the significant causes of impairment worldwide, despite significant advancements in surgical intervention over the past few decades in many of these nations. In priority order, a condition called age-related macular degeneration, diabetic retinopathy, and trachoma are other prominent causes of visual impairment (Resnikoff et al., 2004).

An inquiry into the difficulties in teaching visually impaired students and strategies for maintaining quality control in Nigerian postsecondary educational institutions. It looked at the issues facing higher education worldwide and demonstrated that visually impaired people constitute individuals who have difficulty seeing, whether they are partially blind, have low vision, or are completely blind. As such, they require higher education to break free from the stigma of being pitied and sympathized with. According to the survey, the educational demands of visually impaired students include computer use, optical aids, Braille writing materials, mobility concerns, financial constraints, library resources, staff availability, and facilities (Omede, 2015).

The educational programs provided to students in Norway who were qualified for extracurricular activities but attended regular classes had to be evaluated by instructors and school psychology services. The assessment included looking at the fairness and sufficiency of the programs, as well as considering social inclusion. These factors served as dependent variables and quality indicators. The findings showed that the resources available in different towns impacted the programs' fairness and adequacy. The effectiveness of the programs was found to be significantly influenced by the availability of instructional materials. Although the instructors rated the students' social inclusion scores as low, most parents reported that their children performed well or exceptionally well in school. The study compared the results to a study conducted in 1994 and examined the role of specialized schools for students with visual impairments today. The enrollment numbers in specialized schools remained the same as those measured in 1994.

Over 60% of students with vision problems and no additional disabilities attended college after graduation, indicating that academic programs continued to play a substantial role at these specialized schools even though the sample contained a greater number of students who had various disabilities than in the past. According to the survey, the majority of specialized schools engaged in outreach, with over half offering direct



instruction to children enrolled in general education classrooms (Baker, 1982).

Literature Review

The inspection, diagnosis, and creation of suitable teaching and learning methodologies and courses that are suitable for different kinds of exceptional children are the main concerns of the special education area. Unique needs education, or special education, is the term used to describe independent schools, programs, or teaching designed especially for pupils identified as having exceptional educational requirements.

"Education aimed to make it easier education of people who, for an extensive range of reasons, require extra assistance and flexible instructional techniques to engage and accomplish learning objectives in an educational program," is the definition of special education. Different physical, behavioral, mental, emotional, and social skills could be the causes. While special needs education programs may have a curriculum that is similar to that of the parallel regular education system, they also take into account the unique needs of each student by offering resources such as equipment, space, and specially trained personnel, as well as, when necessary, modifying the curriculum or learning objectives (USI-UNESCO, n.d.).

The traditional notion of "special education" is distinct from that of an inclusive educational system since it is based on integration or segregation rather than inclusion. Among the many elements of inclusive educational systems are the physical design of schools, teaching materials, and teachers themselves. Over several decades, the idea of special educational needs and disabilities (SEND) has changed, taking on new connotations at each stage of development (UCLES, 2017). However, according to Rousan (1998) and UCLES (2017), special education serves as the ultimate explanation of the idea.

Different physical, behavioral, mental, emotional, and social abilities could be the causes. Special needs education programs may have curricula that are similar to those provided in the parallel traditional school system, but they also take into account the unique needs of each student by offering specialized resources (such as equipment, space, or specially trained personnel) and, when necessary, modifying the curriculum or learning objectives (UNESCO-UIS, n.d.). Since it depends on integration or segregation rather than inclusion, the traditional definition of "special education" is different from that of an inclusive educational system. The physical layout of schools, instructional materials, instructors, and many other elements



are modified in systems of inclusive learning to accommodate the requirements of all students (UNESCO, 2017).

Disabilities can have diverse origins, types, manifestations, and effects on individuals. Even individuals with the same disability can be impacted in different ways. Disabilities can be caused by birth defects occurring during in-utero development or congenitally during the birth process, which may result from inadequate medical care during pregnancy, labor, or delivery. Additionally, disabilities can be caused by environmental agents, diseases, traumas, accidents, wars, and other violent conflicts, including land mines.

The Indonesian government makes educational opportunities available to pupils with special needs in addition to all other youngsters (Sharma, 2013). Each child has the right to an education, including science instruction. Science education is a unit that incorporates several components to gather data and effect change that is directly tied to the environment in which humans live. Natural science education and scientific education in schools are closely intertwined. A quality education encompasses more than merely memorizing knowledge and studying for tests. A good education entails more than just academics. The United Nations has set quality education for all as its fourth sustainable development goal.

One of the most important human rights is education. It provides all the abilities and profound understanding to view the outside world with such a fundamental right that we ought additionally to take care of its inherent worth. The child is at the center of quality education. It seeks to improve a child's skills in addition to providing them with information. It enhances their abilities, dispositions, and brains. Personality development is essential to the advantages. There are objectives and an example of highquality education for your child. These are the requirements for what subjects are taught to students in each grade.

Students must have human help available to them during test-taking and subject comprehension. The main areas that have been taken into consideration in this research paper are the effects of visual disabilities on learning, adaptive teaching strategies for students with visual impairments, difficulties experienced by participants with visual impairments, challenges faced by teachers when dealing with visually impaired students, components of the educational experience of visually impaired students, and resolution strategies (Kapur, 2018). The study's background supports the necessity of looking into the phenomena in Pakistan's Faisalabad district.



The study aimed to assess how students in the Faisalabad district perceived the quality of instruction in special education schools.

The study's significance was raising awareness about the standard of education given to visually impaired pupils in the Faisalabad area. The study would incite the district Faisalabad special education school administration to assess the quality of instruction provided in their institutions and implement corrective action to raise it. In addition, the study will assist in modifying the learning atmosphere in special education institutions so that students with visual impairments can get educational services more successfully. The study will draw higher authorities in special education's attention to the potential problems that compromise the quality of training for pupils with visual impairments and help them make appropriate arrangements. This study will provide future researchers with a thorough understanding of the markers of educational quality for students with visual disabilities, enabling them to examine associated issues in the future.

Objectives of the Study

- 1. To determine the cognizance of learners with vision loss about the instructional quality in the Faisalabad district's special education institutes.
- 2. To evaluate the standard of the learning environment for visually impaired pupils in special education institutions.
- 3. To ascertain the curriculum quality that special education schools employ for learners with vision loss.

Research Questions

The researcher intended to investigate the following research questions:

- 1. What level of instruction is provided to visually impaired students in the Faisalabad district's special education schools?
- 2. How good is the learning environment for visually impaired pupils in special education schools?
- 3. How good is the curriculum that special education organizations utilize for their visually impaired students?

Research Methodology

The study aimed to explore the cognizance of the learners with vision loss regarding educational quality in special education institutes of district Faisalabad. Researcher employed following procedure in carrying out the research:

Design of Research

The type of study design that was employed was descriptive. According to Wood and Kerr (2010), there are several options available for



organizing the data analysis in descriptive analysis, ranging from basic to intricate. One thing unites descriptive methods: they provide an overview of the data. There are several ways to summarize data, starting with using content analysis to classify the information so that descriptive statistics like measurements of central tendency and frequency distributions may be applied.

Population and Sampling of the Study

The study included all students with visual impairments in government special education institutions in the Faisalabad district. 60 students with visual impairment enrolled in the government special education institutions in the Faisalabad district was taken as the sample of the study. Convenient sampling technique was used to select the sample of the study. Convenient sampling is used when a person finds difficulty in covering larger population, for example, due to time or cost constraints. It involves the people who are easily available, the people in the street, people a person knows, people who work alone, customers, and so on. It assumes a homogeneous population.

Research Instrumentation

The instrument of the study involves the selection and development of suitable research tools for data collection. In the present study, a questionnaire containing

25 questions with the five Likert scale. The validity of the instrument was performed by the 3 experts in the field of special education. The instrument's reliability was examined. The research instrument's test-retest reliability on Cornbrash's alpha was 0.82, indicating statistical significance.

Data Collection

A self-developed questionnaire was used to gather data for this investigation. For the goal of gathering data, the researcher contacted those who are blind children at the government-run special education schools in the Faisalabad district. The researcher went to field to collect data from the students. The majority of visually impaired students displayed great collaboration. Every statement was distributed to the pupils, and each response was graded appropriately.

Data Analysis and Results

The purpose of the study was to find the level of instruction in the Faisalabad district's special education organizations. 60 learners with vision loss at the government-run special education school in the Faisalabad area provided the data. Frequency and percentage analysis along with mean and standard deviation were used to examine the gathered data.



Table 4.1: Demographic Attributes of the Respondents						
Demographic feature	Category	Frequency	Percentage			
Gender	Male	29	48.3			
	Female	31	51.7			
Age	10-20 Years	20	33.3			
	21-30 Years	23	38.3			
	31 Years & Above	17	28.3			
Disability	Low Vision	37	61.7			
	Blind	23	38.3			
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Table 4.1 represented the gender wise, age wise and disability frequency distribution of the respondent. 48% respondents were male whereby 52% were female who participated in the study. It showed that more than half of the respondents were female who took part in the study. One third of the respondents (38.3%) were falling in the age category of the 21-30 years, whereby a large number of respondents (61.7%) were low vision. *Table 4.2: Quality of Teaching Methods used for Learners with Vision Loss*

2033				
StatementN	Min	Max	Mean	S.D
1. Satisfied with the teaching methods used to 60 teach students with visual impairment.	1	5	3.87	1.033
Audio visual aids are properly used while 60 teaching students with visual impairment.	1	5	3.55	1.111
 Computer is used to present teaching material 60 more effectively for student with visual impairment. 	1	5	3.10	1.349
4. Teacher use fun learning activities to provoke60 student with visual impairment for studies	1	5	3.28	1.329
5. Teacher emphasize on hands on practices for 60 effective delivery of instruction student with visual impairment.	1	5	3.17	1.416
6. Large print material is used to teach student60 with visual impairment.	1	5	2.67	1.160
7. Screen magnifier software are used to teach 60 student with visual impairment.	1	5	2.33	.986



	teacher use techniques and tools for 60 nematics and calculation.) 1	5	2.75 1.202
	assistive technology tools like screen60 ers and braille display are use.) 1	5	2.72 1.151
othei	The availability of Braille books and 60 r accessible reading material for students visual impairment.) 1	5	3.73 1.326
11. stude	The accessibility of digital aid used for 60 ents with visual impairment.) 1	5	2.95 1.048
12.	Educational material such as graph, 60) 1	5	2.77 1.212

12. Educational material such as graph, 60 1 5 2.77 1.212 charts and diagram are provided for students with visual impairment.

Table 4.2 exhibited the opinion of respondents regarding the quality of teaching methods used for learners with vision loss. It was noted that a great number of the respondents (M=3.87, S.D=1.033) were satisfied with the teaching method used to teach the learners with vision loss. The respondents (M=3.73, S.D=1.326) showed positive inclination towards the provision of Braille books and accessible reading material, proper use of audio visual aids were favored by most of the respondents (M=3.55, S.D=1.111), similarly more than half of the respondents (M=3.28, S.D=1.329) opined that fun learning activities were very supportive in learning at the special education school. The results indicated that many of the respondents were moderately satisfied with the teaching method used for the learners with vision loss.

Table 4.3: Quality	of	Learning	Environment	used	for	Learners	with
Vision Loss							

Statement	Ν	Min	Max	Mean S.D
1. Classrooms are properly cleaned.	60	1	5	4.00 1.221
2. Electricity is available in the classrooms.	60	1	5	3.87 1.142
 Age appropriate furniture is available in t classrooms. 	he 60	1	5	3.92 1.154
 Appropriate lights are available in t classroom. 	he 60	1	5	3.38 1.316
5. Noise free environment is provided f effective learning of the students with visu		1	5	3.33 1.298



impairment.

6. Classrooms are airy and spacious for effective 60 1 5 3.43 1.382 learning of students with visual impairment.

Table 4.3 presented the opinion of respondents regarding the quality of learning environment used for learners with vision loss in special educational institutes. It was inferred that majority of the respondents (M=4.00, S.D=1.221) viewed that classrooms were properly cleaned. The respondents (M=3.92, S.D=1.154) displayed positive inclination towards the provision of age appropriate furniture, availability of electricity were favored by most of the respondents (M=3.87, S.D=1.142), similarly a large number of the respondents (M=3.43, S.D=1.382) had the opinion that classrooms were airy and spacious for effective learning of the learners with vision loss.

Table 4.4: Curriculum Quality used for Learners with Vision Loss					
Statement N 1	Min	Max	Mean S.D		
1. Satisfied with the quality of curriculum being 60 taught for students with visual impairment.	1	5	3.15 1.448		
2. Curriculum meets the needs of students with 60 visual impairment.	1	5	3.53 1.065		
3. Curriculum is enriched enough to fulfill the 60 needs of students with visual impairment.	1	5	3.30 1.280		
4. A quality based comprehensive curriculum has 60 been designed for the students with visual impairment.	1	5	3.20 1.312		
5. Co-curricular activities are integral part of the 60 curriculum of students with visual impairment.	1	5	3.22 1.236		
 Curriculum of students with visual impairment 60 is very much supportive in achieving the learning outcomes. 	1	5	3.55 1.320		
 7. Content of the curriculum is easily 60 understandable for the students with visual impairment. 	1	5	3.38 1.427		

Table 4.4 expressed the opinions of respondents regarding the curriculum quality used for learners with vision loss in special educational institutes. The results showed that most of the respondents (M=3.55, S.D=1.320) viewed that curriculum was very supportive in achieving the learning outcomes. The respondents (M=3.53, S.D=1.065) displayed positive inclination towards the idea that curriculum was adequately meeting the needs of learners with vision loss, curriculum content was easily



understandable opined by most of the respondents (M=3.38, S.D=1.427). It was evident that curriculum was comparatively effective for teaching the learners with vision loss.

Discussion

The study was carried out to evaluate the perception of the learners with vision loss about the quality of education in special education school district Faisalabad. The objectives of study were to explore the quality of teaching methods used for students with visual impairment in special education schools of district Faisalabad, and quality of learning environment, and the quality of curriculum being used for students with visual impairment in special education institutes. Most number of respondents agreed about idea that teachers emphasized on hand on practice for effective delivery of instruction for learners with visual impairment. Most of the respondents agreed about idea that audio visual aids were properly used while teaching learners with visual impairment. Majority number of the respondents agreed about the idea that teachers used fun learning to provoke student with visual impairment for studies. About less than half number of respondents agreed about idea that computer is used to present teaching material more effectively for students with visual impairment. More than half number of respondents disagreed idea that the assistive technology tools like screen readers.

Blindness is a loss of vision or the inability to see. The most severe circumstances leave one completely blinded. It also suggests that none of the following can help you fix your vision: surgery, medication, glasses, contact lenses, or eye drops. It's urgent if you suddenly lose your vision. Seeking immediate medical attention is crucial (Cleveland, 2022). The US government refers to someone as having "legal blindness" when determining their eligibility for specific forms of assistance. Even with the finest correction, a person's better-seeing eye must have 20/200Trusted Source sight or less to be eligible. Any vision loss that interferes with daily activities, such as reading and watching TV, is referred to as visual impairment (Nichols, 2023).

Visual impairments might also make it difficult to carry out daily tasks. For example, you could discover that you trip over objects more often, have trouble moving uphill or downstairs, or have trouble navigating uneven terrain (Osman, 2017). Blindness can result from a wide range of non-infectious disorders, some of which only manifest in their most advanced stages. One kind of schooling that is linked to students with unique needs and challenges is special education. Children who have both internal and external issues that impede their education or learning are



considered to have exceptional needs (Forbis, et al., 2016). Based on the underlying causes, children with special needs can be divided into two categories: (1) those who require special care because of long-term anomalies in their development (internal or physical factors) (Haryanto, 2011); and (2) those who require special care but only temporarily have disabilities (external factors or environmental situations) (Soendari, 2008). A paradigm change from a medical to a social approach has occurred in Indonesia's special education system (Rochyadi & Almin, 2003).

Findings of the study

Following were the findings of the study:

- 1. Most of the study participants 52% were female, one third of the respondents (38.3%) were falling in the age category of the 21-30 years, whereby a large number of respondents (61.7%) were low vision.
- 2. The quality of teaching methods used for learners with vision loss was examined. It was noted that a great number of the respondents (M=3.87, S.D=1.033) were satisfied with the teaching method used to teach the learners with vision loss. The respondents (M=3.73, S.D=1.326) showed positive inclination towards the provision of Braille books and accessible reading material, proper use of audio visual aids were favored by most of the respondents (M=3.55, S.D=1.111), similarly more than half of the respondents (M=3.28, S.D=1.329) opined that fun learning activities were very supportive in learning at the special education school. The results indicated that many of the respondents were moderately satisfied with the teaching method used for the learners with vision loss.
- 3. The opinion of respondents regarding the quality of learning environment used for learners with vision loss in special educational institutes was ascertained. It was inferred that majority of the respondents (M=4.00, S.D=1.221) viewed that classrooms were properly cleaned. The respondents (M=3.92, S.D=1.154) displayed positive inclination towards the provision of age appropriate furniture, availability of electricity were favored by most of the respondents (M=3.87, S.D=1.142), similarly a large number of the respondents (M=3.43, S.D=1.382) had the opinion that classrooms were airy and spacious for effective learning of the learners with vision loss.
- 4. The opinions of respondents regarding the curriculum quality used for learners with vision loss in special educational institutes



were determined. The results showed that most of the respondents (M=3.55, S.D=1.320) viewed that curriculum was very supportive in achieving the learning outcomes. The respondents (M=3.53, S.D=1.065) displayed positive inclination towards the idea that curriculum was adequately meeting the needs of learners with vision loss, curriculum content was easily understandable opined by most of the respondents (M=3.38, S.D=1.427). It was evident that curriculum was comparatively effective for teaching the learners with vision loss.

Conclusions

Students with visual impairment face various barriers and challenges in accessing the general curriculum, participating in classroom activities, and developing social relationships with their peers and teachers. These barriers include physical, instructional, attitudinal, and environmental factors that limit their learning opportunities and outcomes. Students with visual impairment have diverse and complex needs that require individualized and differentiated support from gualified and trained teachers, specialists, and other stakeholders. They also need appropriate and accessible teaching-learning tools, materials, and resources that enhance their engagement and achievement in academic subjects. Others express dissatisfaction with the quality of education they receive, such as feeling excluded, isolated, or ignored, receiving inadequate or inappropriate instruction or support, or encountering negative attitudes or stereotypes from others. The quality of teaching method was good especially the use of Braille books, fun learning activities and use of audio visual aids. The learning environment was cleaned with various available resources such as electricity, spacious rooms and furniture. The curriculum was moderately good with appropriate content, understandability for the learners with vision loss.

Recommendation of the Study

Researcher recommended the following:

1. Computer should be used for effective teaching of learners with vision

impairment.

- 2. Teacher may inculcate the fun learning activities to provoke students with visual impairment in their studies.
- 3. Screen magnifiers should be used to magnify the learning content for low vision students.
- 4. Digital learning aids should be made accessible for students with visual impairment in classroom settings.



5. Curriculum should be adapted to meet the needs of learners with loss of vision in special educational institutes.

Limitations and Delimitations

Both traditional and special education schools were the only ones included in the study in Faisalabad The people of the Faisalabad district who are visually challenged are the only group to which the outcomes can be applied. The following was the scope of the study:

- 1. The Faisalabad district.
- 2. Schools with special education programs near cities.
- 3. Sixty visually impaired students.
- 4. Low vision and blind students.

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