

# Examining The Educational Problems Of Children With Down Syndrome; Special Education Teachers' And Psychologists' Perspectives, Pakistan

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## ABSTRACT

**Motive:** Imparting education to students with Down syndrome poses challenges due to the educational problems. The motive of study was to examine the Educational Problems of Children with Down Syndrome from the Special Educators' and psychologist's Perspectives in Punjab, Pakistan. The study aimed to gain insights into the practices employed by teachers and psychologists in the Department of Special Education, Pakistan to address these learning difficulties.

**Research Design:** This study employed a descriptive study approach using survey method to examine the educational problems experienced by students with Down syndrome from the perspectives of special school teachers and psychologists. Sample was taken by using Purposive sampling. The data were collected through a self-constructed questionnaire from the special education teachers and psychologists.

**Findings:** Quantitative analysis revealed that special education teachers and psychologists acknowledged the numerous obstacles faced by students with Down syndrome in their learning, including deficient skills, low IQ levels, memory storage issues, communication problems, behavioral challenges, passivity, and distraction issues. Furthermore, the findings indicated that there was no significant difference of opinion of special education teachers and psychologists regarding educational difficulties faced by students with Down syndrome.

**Conclusion:** In conclusion, this study highlighted the significance of recognizing and addressing the diverse educational problems faced by students with Down syndrome. By employing effective strategies and fostering a collaborative approach, educators and psychologists can create inclusive learning environments that facilitate the growth and development of these students, enabling them to achieve their educational goals and lead fulfilling lives.

**Practical Implications:** These findings underscored the importance of implementing diverse and effective teaching strategies tailored to the specific needs of students with Down syndrome. Special educators play a crucial role in identifying and addressing these challenges by providing individualized support, adapting instructional methods, and fostering a supportive and inclusive learning environment.

**Keywords:** learning problems, Down syndrome, special education teachers, psychologist.

## Introduction

Trisomy 21 is named because a kid is born with an additional copy of the 21st chromosome. This is also known as Down syndrome. As a result, children have many physical and psychological problems. Institutional and cultural support for persons with Down syndrome and their families, a wide variety of choices for overcoming the problems of Down syndrome are now accessible (Bull, 2022). Mosaicism is a condition that affects children who are born with one or more additional chromosomes. Compared to trisomy 21, the Down mosaic syndrome has fewer symptoms (Toutain et al., 2020). Differences in social abilities and awareness may also contribute to tensions in one's relationships with one's contemporaries (Karagianni & Drigas., 2022). The student with Down syndrome may have difficulties with executive control of working memory, which makes it challenging for them to comprehend and carry out instructions. (Sabat et al., 2020). The combination of physical, mental, and health attributes naturally come together to form a recognizable set of characteristics known as a syndrome. Down syndrome, named after John Langdon Down who first identified it, is a genetic disorder that affects an individual's motor, language, and cognitive skills, resulting in various physical abnormalities (Onyedibe, Ugwu, Mefoh, & Onuri, 2018). The condition arises from an abnormality in the chromosomes, specifically the development of 47 chromosomes instead of the usual 46. Identifying individuals with Down syndrome is relatively effortless due to their distinctive appearance (Carr, 1995). Students with Down syndrome often benefit most from a visual approach through computer technology to education. Creating visual representations of data or sections of text to aid comprehension is a

crucial skill. (Felix et al., 2020). Different persons with Down syndrome have different levels of cognitive processing capacity, although most of them could use more time on tasks. Students with Down syndrome may need more time than their peers to fully absorb and internalize new material before they can memorize it. (da Cruz Netto et al., 2020). Students with Down syndrome frequently struggle to concentrate for extended periods of time and, as a result, can become disruptive after a certain point. Provide them with a ruler to run down the page or instruct them to use their finger as a guide if they experience a lapse in reading comprehension that causes them to lose their place on the page (Faragher., 2023). These students require a great deal of support, reassurance, and praise in order to remain on track. Additionally, it is beneficial for them to be given special tasks that are adapted to their requirements and provide them with opportunities for achievement (Porter., 2022). In their school lives, students with Down syndrome encounter a range of challenges, and it is essential for teachers to effectively address these issues to promote not only their physical skill development but also their cognitive abilities (Clarke & Faragher, 2014). For example, they may experience delayed mental and physical development, lower intelligence levels, ear infections, ocular diseases, cardiac, pulmonary, and gastrointestinal abnormalities, thyroid dysfunctions, fatigue, muscle weakness, hyperflexibility, broad feet with short toes, a small neck and head, a small oral cavity, persistent nasal discharge, constipation, communication difficulties, particularly in using complex words, difficulties in retaining knowledge in long-term memory, limited encouragement in tasks, distraction, challenges in applying previous knowledge to new tasks, difficulties in task and activity

management, and issues related to attitude (Westwood, 2009). By addressing these issues effectively through appropriate teaching strategies, materials, and supportive teaching skills, teachers can facilitate improvements in their learning outcomes (Westwood, 2009). Learning difficulties and subsequent delays in development occur often in people with Down syndrome. The similarities between these cases can help teachers and therapists design more efficient lessons and interventions. (Vicari, 2006). Reading greatly contributes to the development of children's vocabularies and language abilities, which may be of particular benefit to children with Down syndrome due to the unique language deficiencies associated with this disorder (Baddeley et al., 2017). Students who have Down syndrome may follow a curriculum that is distinct from that followed by their peers, or they may follow the same curriculum as their peers but be subject to different grading criteria and assignment specifications. A great deal is contingent on the structure of the educational institution, particularly in the event that, in addition to general sessions, there are a variety of classes geared toward different categories of students or professors who specialize in particular fields. Additional difficulties in learning and conditions that affect the learner, such as dyslexia or autism, can also have an effect on the strategy that is used (Hessling Prah et al., 2020). A student with Down syndrome may have an easier time learning and remembering knowledge through the use of auditory, visual, and tactile components. Bean-in-a-box games and other multi-sensory activities that require kids to reply to a question, repeat an answer provided by a classmate, and then move an object can also be helpful. Read up on the concept of multisensory learning (Kyriakou et al., 2020). Children with intellectual, physical, or emotional disabilities have special educational requirements that must be satisfied if they

are to get an effective education and reach their full potential (Zhang & Katsiyannis, 2021). Special education should be reflected not only in the room where children with various disabilities are permitted, but also elsewhere. However, it can also be used as an integrative strategy for working on cognitive issues. (Kauffman et al., 2018). Down syndrome children have a weaker capacity for verbal knowledge retention and processing than they do for visual information. Several studies have found that when verbal information is accompanied by relevant visual content, the ability to retain and recall it is greatly enhanced. As a result of this information, educators are emphasizing the importance of using visual aids like pictures, signs, and print when instructing children with Down syndrome. This strategy makes the best use of the children's superior visual memory skills (Karagianni & Drigas, 2022). People with Down syndrome experience the entire emotional spectrum and have their own unique strengths, flaws, and personalities. For example, the majority of people with Down syndrome thrives on routines and insists on consistency when faced with day-to-day challenges. (Krueger et al., 2021). Caregivers may find it difficult to compare their child's progress to that of other children. Physical therapists are commonly sought out by families in order to better recognize developmental milestones and developing skills. (Wentz et al., 2021). Federal law guarantees most children with Down syndrome a free, suitable public education. Persons with Disabilities Education Act (IDEA), Public Law 105-17: Individuals with Disabilities Education Act (IDEA) mandates the provision of adequate, free, and appropriate educational services and related technology in order to guarantee that students with disabilities have equal access to educational opportunities. From the time a child is born until the time they graduate high school or turn 21, whichever comes first, they are entitled to these services. Most programs

that begin with early intervention fall under the purview of this law (Pianezzola de Oliveira et al., 2018). Special education teachers and psychologists play crucial roles in addressing the educational problems faced by children with Down syndrome. They work collaboratively to provide tailored support and interventions to meet the unique learning needs of these students. Special education teachers are skilled professionals who possess expertise in adapting and modifying instructional strategies to accommodate the diverse abilities and challenges of students with Down syndrome. They employ a range of evidence-based teaching techniques, such as visual aids, hands-on activities, and multisensory approaches, to promote meaningful learning experiences. These teachers develop Individualized Education Programs (IEPs) that outline specific goals, accommodations, and services for each student with Down syndrome. They closely monitor progress, track developmental milestones, and provide ongoing assessments to ensure appropriate adjustments to instruction. Psychologists, on the other hand, contribute valuable insights by conducting assessments and evaluations to identify cognitive strengths and weaknesses, as well as emotional and behavioral factors that may impact learning. They administer standardized tests, conduct observations, and gather information from parents and teachers to create comprehensive profiles of individual students. This information guides the development of targeted interventions and recommendations for educational planning. Furthermore, special education teachers and psychologists serve as valuable resources for families of children with Down syndrome. They offer guidance, support, and information about available services, community resources, and assistive technologies that can facilitate learning and development. They collaborate with parents and caregivers to

establish strong home-school partnerships, ensuring consistency and continuity of support. Special education has always been lagging in Pakistan academically. Children with Down syndrome have been neglected criminally in Pakistan and Punjab. South Punjab is no different in facilitating children with Down syndrome. Exploring the educational problems of children with Down syndrome will make it easy for such children to grow academically.

### **Objectives of the Study**

1. To investigate the educational problems of children with Down syndrome in Punjab.
2. To propose coping strategies to help children with Down syndrome in their schools.

### **Questions of the Study**

1. What are the educational problems of children with Down syndrome in Punjab?
2. What are the coping strategies to help children with Down syndrome in schools?

### **Significance of Research**

The objective of this research study was to gain insight into the perspectives of special school teachers and psychologists in the Department of Special Education, Punjab regarding the learning challenges encountered by students with Down syndrome. Additionally, it aimed to explore the teaching techniques, styles, and methods employed by special education teachers when instructing students with Down syndrome. The study also sought to examine the perspectives of teachers and psychologists on strategies used to overcome teaching difficulties and the specific learning obstacles faced by students with Down syndrome. To gain a better understanding of the factors contributing to the challenges faced by teachers in educating students with Down

syndrome, psychologists were included in the research. It is important to note that this study solely focused on the main research problem, which centered on exploring the learning difficulties experienced by students with Down syndrome, and did not delve into extensive details regarding the production, characteristics, and broader societal issues surrounding children with Down syndrome.

### **Research Methodology**

The study was primarily descriptive. Design of research was survey design. There are 174 institutes, and 209 special education teachers and psychologists are dealing with students with Down syndrome in the Department of Special Education, Punjab. Sample of study was selected using multistage cluster sampling as well as purposive sampling. Sample of the present study featured 136 special education teachers and psychologists who are dealing children with Down syndrome in special education schools and centers.

### **Instrumentation**

For Examining the Educational Problems of Children with Down Syndrome, the researcher developed a questionnaire. The questionnaire has two parts; one regarding the demographics of respondents and the other part was about questions of educational problems of children with Down syndrome. The research instrument (questionnaire) has two parts. While preparing the first part, the researcher focused on the demographic data. The second part consists of four sections with five-point Likert rating scale which are described as; Educational Problems of Children with Down syndrome. The instrument has covered the Educational Problems of Children with Down syndrome including needing more assistance with tasks such as learning to read and write and completing tasks, causing mild to moderate intellectual impairment, delays in speech and motor skills, participation in physical activities like other children, weak auditory memory, hearing and vision weakness,

delayed movement skills, delayed cognitive or learning skills, inconvenient conditions in schools, lack of individualization, troubled communication with peers, lack of specialists in their educational institutes, poor study skills, lack of extra-curricular activities in schools, and lack of expression in their schools.

### **Pilot Testing of the Instrument**

To determine if the questionnaires deployed were capable of addressing the study questions, pilot experiments were conducted. Initially, a pilot test with 50 individuals was undertaken. The findings depicted 0.88 scores on reliability which assures high reliability of the instrument.

### **Collection of the Data**

The researcher used a quantitative (questionnaire) survey. However, a self-designed survey was used to collect data. The researcher distributed the questionnaire to respondents in groups and individually. Those who could not be reached in person were immediately contacted through telephone. The data was collected physically and where accessibility was not possible, Google form was used to collect data. With authorization from the school officials, the online questionnaire of the survey questionnaire was produced, and the link was distributed to the teaching staff of children with Down syndrome.

### **Data Analysis**

Using SPSS 21, the collected data were tabulated and assessed. The outcomes were obtained using both descriptive and inferential statistics. Frequencies and percentages were computed to demonstrate the demographic items and questions, and the independent sample t-test and one-way analysis of variance were applied in order to highlight the differences in instructors' opinions based on the demographic data.

**Demographic Analysis of Sample****Table 01** Frequency Distribution at the Basis of Demographics

Title	Description	Frequency	Percentage (%)
Gender	Male	53	39
	Female	83	61
Age of Respondents	21-30 Y	61	44.9
	31-40 Y	46	33.8
	41-50 Y	27	19.9
	51-60 Y	2	1.5
Designation	Teachers (ID)	72	52.9
	Psychologist	64	47.1
Profession Qualification	Bachelors	22	16.2
	Master	57	41.9
	M.Phil.	52	38.2
	Ph.D	5	3.7
Area of Posting	Rural	49	36
	Urban	87	64
Division of School	Lahore	16	11.8
	Multan	15	11
	Rawalpindi	4	2.9
	Sargodha	8	5.9
	Bahawalpur	12	8.8
	DG Khan	57	41.9
	Faisalabad	8	5.9
	Gujranwala	5	3.7
Experience	Sahiwal	11	8.1
	1-5 Y	53	39
	6-10 Y	53	39
	11-15 Y	13	9.6
	>15 Y	17	12.5
		136	100

**Table 02** Opinion Differences of Respondents on the Base of Gender (Independent Sample t-test)

Gender	N	M	SD	Df	t	Sig.
Male	53	64.42	5.03	134	-	.861
Female	83	64.60	6.65		.175	

\*P &gt; .05 Level of Significance

The numerical data of male (N=53, M=64.42, SD=5.03) and for female (N=83, M=64.60, SD=6.65) with t-statistics (t (134) = -.175, P> .05) depicting that there is no

significant difference in the opinion of male and females regarding Educational Problems of Children with Down syndrome.

**Table 03** Opinion Differences of Respondents at the Base of Designation (Independent Samplet-test)

Designation	N	M	SD	Df	t	Sig.
Teachers	72	64.68	6.93	134	-	.759
Psychologist	64	64.36	4.93		.308	

\*P > .05 Level of Significance

The empirical information for Special education teachers(N=72, M=64.68, SD=6.93) and for psychologists (N=64, M=64.36, SD=4.93) with t-statistics (t (134) = -.308, P >.05) which showed that there is

no significant difference in the opinions of special education teachers and psychologists respondents about Educational Problems of Children with Down syndrome.

**Table 04** Opinion Differences of Respondents at the Base of Area of Posting (Independent Sample t-test)

Area of Posting	N	M	SD	Df	t	Sig.
Rural	49	63.59	6.92	134	-	.176
Urban	87	65.06	5.48		1.360	

\*P < .05 Level of Significance

The empirical information for rural (N=49, M=63.59, SD=6.92) and for urban (N=87, M=65.06, SD=5.48) with t-statistics (t (134) = -1.360, P< .05) which led that there is a

significant difference in the opinion of respondents from rural areas and urban areas regarding Educational Problems of Children with Down syndrome.

**Table 05** Differences of Opinion of Respondents at the Base of their Age (One-Way ANOVA).

Age of Respondents	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	368.42	3	122.81	3.543	.016
Within Groups	4575.46	132	34.66		
Total	4943.88	135			

\*P < .05 Level of Significance

Table 05 indicated that the empirical information for Between Groups (Sum of squares=368.42, df=3, Mean square=122.81) and for Within Groups(Sum of squares=4575.46, df=132, Mean square=34.66) with one way ANOVA (F

(135) = 3.543, P < .05) which proposed that there is a significant difference in the opinions of respondents from Between Groups and Within Groups regarding Educational Problems of Children with Down syndrome.

**Table 06** Opinion Differences of Respondents at the Base of Qualification (One-Way ANOVA).

Qualification	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	474.06	3	158.02	4.667	.004
Within Groups	4469.82	132	33.86		
Total	4943.88	135			

\*P < .05 Level of Significance

Table 6 indicated that the empirical information for Between Groups(Sum of squares=474.06, df=3, Mean square=158.02) and for Within Groups(Sum of squares=4469.82, df=132, Mean square=33.86) with one way ANOVA (F (135) = 4.667, P < .05) which evinced that

there is a significant difference in the opinions of teachers and psychologist from Between Groups and Within Groups regarding Educational Problems of Children with Down syndrome.

**Table 07** Comparing Opinion of Respondents at the Base of Experience (One-Way ANOVA).

Experience	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	124.87	3	41.62	1.140	.335
Within Groups	4819.02	132	36.51		
Total	4943.88	135			

\*P > .05 Level of Significance

Table 07 indicates that the empirical information for Between Groups(Sum of squares=124.87, df=3, Mean square=41.62) and for Within Groups(Sum of squares=4819.02, df=132, Mean square=36.51) with one way ANOVA (F

(135) = 1.140, P > .05) which proved that there is no significant difference in the opinions of respondents from Between Groups and Within Groups regarding Educational Problems of Children with Down syndrome.

**Table 08** Comparing Opinion of Respondents at the Base of Division (One-Way ANOVA).

Division	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	425.15	8	53.14	1.494	.166
Within Groups	4518.73	127	35.58		
Total	4943.88	135			

\*P > .05 Level of Significance

Table 08 that the empirical information for Between Groups(Sum of squares=425.15, df=8, Mean square=53.14) and for Within Groups(Sum of squares=4518.73, df=127, Mean square=35.58) with one way ANOVA (F (135) = 1.494, P > .05) which

manifested that there is no significant difference in the opinions of respondents from Between Groups and Within Groups regarding Educational Problems of Children with Down syndrome.



**Table 09** Comparing Opinion of Respondents at the Base of Gender (Independent Sample t- test)

Gender	N	M	SD	Df	t	Sig.
Male	53	256.81	15.26	134	.423	.673
Female	83	255.18	25.27			

\*P > .05 Level of Significance

Table 09 indicates that the empirical information for male (N=53, M=256.81, SD=15.26) and for female (N=83, M=255.18, SD=25.27) with t-statistics (t (134) =.423, P>.05) which showed that there is no

significant difference in the opinions of male and female respondents about Examining the Educational Problems of Children with Down Syndrome.

**Table 10** Comparing Opinion of Respondents at the Base of Designation (Independent Sample t-test)

Designation	N	M	SD	Df	t	Sig.
Teachers	72	256.15	25.89	134	-.190	.850
Psychologist	64	255.44	16.41			

\*P > .05 Level of Significance

Table 10 indicates that the empirical information for teachers (N=72, M=256.15, SD=25.89) and for psychologists(N=64, M=255.44, SD=16.41) with t-statistics (t (134) = -.190, P> .05) which shows that there

is no significant difference in the opinions of special education teachers and psychologists respondents about Examining the Educational Problems of Children with Down Syndrome.

**Table 11** Comparing Opinion of Respondents at the Base of Area of Posting (Independent Sample t-test)

Area of Posting	N	M	SD	Df	t	Sig.
Rural	49	250.63	25.29	134	-2.10	.038
Urban	87	258.74	19.24			

\*P < .05 Level of Significance

The empirical information for rural (N=49, M=250.63, SD=25.29) and for urban (N=87, M=258.74, SD=19.24) with t-statistics (t (134) = -2.10, P < .05) which shows that there is a significant difference in the

opinions of teachers from rural areas and teachers from urban areas regarding Examining the Educational Problems of Children with Down Syndrome.

**Table 12** Comparing Opinion of Respondents at the Base of their Age (One-Way ANOVA)

Age of Respondents	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3146.24	3	1048.75	2.254	.085
Within Groups	61426.16	132	465.35		
Total	64572.40	135			

\*P > .05 Level of Significance

The empirical information for Between Groups (Sum of Squares=3146.24, df=3,

Mean Square=1048.75) and for Within Groups (Sum of Squares=61426.16, df=132,

Mean Square=465.35) with One Way ANOVA ( $F(135)=2.254$ ,  $P>.05$ ) which leads to the decision that there is no significant difference in the opinions of teachers from

Between groups and Within Groups regarding Examining the Educational Problems of Children with Down Syndrome.

**Table 13** Comparing Opinion of Respondents at the Base of Qualification (One-Way ANOVA)

Qualification	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6357.03	3	2119.01	4.805	.003
Within Groups	58215.37	132	441.03		
Total	64572.40	135			

\* $P < .05$  Level of Significance

The empirical information for Between Groups (Sum of Squares=6357.03,  $df=3$ , Mean Square=2119.01) and for Within Groups (Sum of Squares=58215.37,  $df=132$ , Mean Square=441.03) with One Way ANOVA ( $F(135)=4.805$ ,  $P<.05$ ) which leads to the decision

that there is a significant difference in the opinions of teachers from Between groups and Within Groups regarding Examining the Educational Problems of Children with Down Syndrome.

**Table 14** Comparing Opinion of Respondents at the Base of their Experience (One-Way ANOVA)

Experience	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1735.77	3	578.59	1.215	.307
Within Groups	62836.63	132	476.04		
Total	64572.40	135			

\* $P > .05$  Level of Significance

The empirical information for Between Groups (Sum of Squares=1735.77,  $df=3$ , Mean Square=578.59) and for Within Groups (Sum of Squares=62836.63,  $df=132$ , Mean Square=476.04) with One Way ANOVA ( $F(135)=1.215$ ,  $P>.05$ ) which leads to the

decision that there is no significant difference in the opinions of respondents from Between groups and Within Groups regarding Examining the Educational Problems of Children with Down Syndrome.

**Table 15** Comparing Opinion of Respondents at the Base of their Division (One-Way ANOVA)

Division	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1735.77	8	726.18	1.569	.140
Within Groups	62836.63	127	462.70		
Total	64572.40	135			

\* $P > .05$  Level of Significance

The empirical information for Between Groups (Sum of Squares=1735.77,  $df=8$ , Mean Square=726.18) and for Within Groups (Sum of Squares=62836.63,  $df=127$ , Mean Square=462.70) with One Way ANOVA ( $F(135)=1.569$ ,  $P > .05$ ) which leads that there is no significant difference in the opinions of respondents from between groups and within groups regarding examining the educational problems of children with Down Syndrome.

## Discussion

This study was conducted to determine the special educators' and psychologist's perspective to examining the educational problems of children with Down syndrome in department of Special Education Punjab, Pakistan. The study examined Educational Problems of Children with Down syndrome (include need of extra help in reading and writing, following directions, mild to moderate intellectual impairment, delays in speech and motor skills, weak auditory memory, hearing and vision weakness, delayed cognitive or learning skills, inconvenient conditions in schools, lack of individualization, troubled communication with peers, lack of specialists in educational institutes, poor study skills, no extra-curricular activities in schools, insufficient opportunities to express themselves). This study employed a descriptive study approach to examine the educational problems experienced by students with Down syndrome from the perspectives of special school teachers and psychologists. Purposive sampling was used to select participants, and data were collected through a self-constructed questionnaire. The significant finding was that special education teachers and psychologists acknowledged the presence of multiple obstacles that hinder the educational progress of students with Down syndrome. These obstacles include deficient skills, low IQ levels, memory storage issues, communication problems, behavioral challenges, passivity, and distraction issues. These findings align with previous research

and emphasize the complex nature of the educational difficulties experienced by students with Down syndrome. As supported by past study that additional difficulties in learning and conditions that affect the learner, such as dyslexia or autism, can also have an effect on the strategy that is used (Hessling Prah et al., 2020). Additionally, the study revealed that there was no significant difference of opinion among special education teachers regarding the educational difficulties faced by students with Down syndrome. This indicates a consensus among educators regarding the common challenges that need to be addressed when designing effective strategies and interventions for these students. On the basis of comparison of gender based opinion (independent sample t-test) there was no substantial difference in the viewpoint of respondents about examining the educational problems of children with Down syndrome. When compared at the base of designation (independent sample t-test) there was no substantial difference in the viewpoint of respondents about examining the educational problems of children with Down syndrome. While analyzing mean value of responses of respondents at the base of area of posting (independent sample t-test) there was a significant difference in the viewpoint of respondents about examining the educational problems of children with down syndrome. Different persons with Down syndrome have different levels of cognitive processing capacity, although most of them could use more time on tasks.(da Cruz Netto et al., 2020). Students with Down syndrome frequently struggle to concentrate for extended periods of time and, as a result, can become disruptive after a certain point (Faragher., 2023). These students require a great deal of support, reassurance, and praise in order to remain on track (Porter, 2022). One-way ANOVA revealed that there was no significant variation in respondents' opinions of the educational issues of children with Down syndrome based on their age. One-way ANOVA suggest that there was a note-worthy difference in the responses of respondents on

the basis of their education about examining the educational problems of children with Down syndrome. Children with intellectual, physical, or emotional disabilities have special educational requirements that must be satisfied if they are to get an effective education and reach their full potential (Zhang & Katsiyannis, 2021). The student with Down syndrome may have difficulties with executive control of working memory, which makes it challenging for them to comprehend and carry out instructions. (Sabat et al.,2020). Children with Down syndrome due to the unique language deficiencies associated with reading disorder (Baddeley et al., 2017). Previous studies showed that Davis (2008) featured specific deficits in verbal memory, developmental motor and language delay, increased risk of medical problems and cognitive deficits as educational problems of children with Down syndrome.

## **Conclusion**

In conclusion, this study examined the educational problems experienced by students with Down syndrome from the perspectives of special school teachers and psychologists. The findings highlighted the various challenges faced by these students in their learning journey, as identified by the teachers themselves. The significant finding is that teachers and psychologists acknowledged the presence of multiple obstacles that hinder the educational progress of students with Down syndrome. These obstacles include deficient skills, low IQ levels, memory storage issues, communication problems, behavioral challenges, passivity, and distraction issues. These findings aligned with previous research and emphasize the complex nature of the educational difficulties experienced by students with Down syndrome. These findings underscored the importance of implementing diverse and effective teaching strategies tailored to the specific needs of students with Down syndrome. Special

educators and psychologists play a crucial role in identifying and addressing these challenges by providing individualized support, adapting instructional methods, and fostering a supportive and inclusive learning environment. It is evident from the study that a comprehensive approach is required to overcome the educational problems faced by students with Down syndrome. Collaboration between special educators, parents, and other professionals involved in the education of these students is vital to ensure their holistic development and academic success. The insights gained from this study can inform the development of targeted interventions, specialized curriculum, and teacher training programs aimed at enhancing the educational experiences and outcomes of students with Down syndrome. By addressing the identified obstacles and implementing evidence-based strategies, educators can empower these students to reach their full potential and facilitate their integration into mainstream educational settings.

## **Limitations:**

However, it is important to acknowledge the limitations of this study. The findings are based on the perspectives of special school teachers, and additional research incorporating the viewpoints of other stakeholders such as parents, students, and other professionals would provide a more comprehensive understanding of the educational problems faced by students with Down syndrome.

## **Recommendations**

Following recommendations were made on the results and conclusions:

- The researcher can explore the current research on educational interventions for children with Down Syndrome, in order to understand the existing interventions that have been successful for this population.

- The researcher should consider the diversity of the Down Syndrome population, and aim to explore ways to tailor interventions to meet individual needs.
- The researcher can investigate the role of parents and teachers, by exploring their experiences and perspectives and identifying ways to support them in their roles.
- The researcher should use a variety of research methods, such as surveys, interviews, case studies, and observational studies, to provide a more comprehensive understanding of the topic.
- The researcher can consider the broader context of the lives of children with Down Syndrome, including their social, emotional, and physical well-being, as education is just one aspect of their lives.
- The researcher should collaborate with stakeholders, such as parents, educators, and advocacy groups, to ensure that the research is relevant and impactful, and involving these stakeholders in the research process can help to promote greater understanding and acceptance of children with Down Syndrome.

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