

Master of Science in Public Health



*Assessment of teacher's attitude regarding inclusive
education in private and public schools of
Rawalpindi/Islamabad*

By

(Mariyam Khalid)

**Al-Shifa School of Public Health, PIO,
Al Shifa Trust Eye Hospital
Quaid-i-Azam University
Islamabad, Pakistan**

(2023)

*(Assessment of teacher's attitude regarding inclusive
education in private and public schools of
Rawalpindi/Islamabad)*

(MARIYAM KHALID)

(362878-PIO/MSPH-2021)

Dissertation submitted in partial fulfilment of the requirement for the
degree of:

MASTER OF SCIENCE IN PUBLIC HEALTH(202)

to

**Al-Shifa School of Public Health, PIO, Al Shifa Trust Eye Hospital,
Faculty of Medicine
Quaid-i-Azam University,
Islamabad.**

Word Count: 11006

Declaration

In submitting this dissertation, I certify that I have read and understood the rules and regulations of DPH and QAU regarding assessment procedures and offences and formally declare that all work contained within this document is my own apart from properly referenced quotations.

I understand that plagiarism is the use or presentation of any work by others, whether published or not, and can include the work of other candidates. I also understand that any quotation from the published or unpublished works of other persons, including other candidates, must be clearly identified as such by being placed inside quotation marks and a full reference to their source must be provided in proper form.

This dissertation is the result of an independent investigation. Where my work is indebted to others, I have made acknowledgments.

I declare that this work has not been accepted in substance for any other degree, nor is it currently being submitted in candidature for any other degree.

Dr Ume Sughra

(Name of Supervisor)

Date:15-03-2023
Al-Shifa School of Public Health,
PIO, Al Shifa Trust Eye Hospital

Mariyam Khalid

(Name of Student)

(362878)
MSPH (2023)

Date:15-03-2023

ABSTRACT

Background

The advocates of inclusive education believe that all learners must learn in same circumstances to minimize discrimination. Teachers' attitudes and beliefs toward inclusive education are instantly reflected in their classroom activities and practices. This research will concentrate on public and private education in schools. It will investigate their attitudes toward inclusive education and how these attitudes alter as a consequence of variables such as age, gender, teaching experience, and inclusive education training.

Materials and Methods

Three hundred and eighteen teachers from private and public school were enrolled in the study, completing a questionnaire regarding demographic factors and attitude of teachers with respect to cognitive, affective and behavioral factors. Chi Square analysis was done and Cronbach's back Alpha value was 0.8. The p-value of < 0.05 was taken as significant.

Results

A total of 318 participants were in the study of which 68% females were from public schools, 21.1 % had more than 10 years of experience, 50% contacted with disabled child, the comparison of private and public school with cognitive attitude have significant results with p-value 0.005.

Conclusion

Finally, the study revealed low levels of negative attitude from private school teachers, medium levels of concerns, and high levels of favorable attitudes toward inclusive education.

Keywords:

Attitudes, inclusive education; general education; special education

ACKNOWLEDGMENTS

In the name of Allah, the most Merciful and Beneficent

First of all, I am thankful to Allah Almighty, the most merciful and beneficent, for making the journey of my life till this point, including the completion of my thesis, which is a blessing indeed. I would also like to extend my gratitude to my dearest friends, who owe me a big time for their support throughout my research work. I humbly thank all those who have supported me in this regard.

My utmost gratitude to my thesis supervisor, **Dr Ume Sughra**; without her expertise and guidance this would not have been possible. In spite of her busiest and tiring routine, she provided me with her adroit guidance and worthy suggestions throughout this time.

I would also like to pay my gratitude to the administration, teachers and administration of public and private schools of Rawalpindi, Islamabad, who allowed me to carry out my study at their schools and provided all the necessary help during data collection phase. My deepest gratitude to the teachers who had spared their precious time and provided me required information for the completion of my study.

I owe my supreme gratitude towards my parents for their unconditional love and support for me. They have always supported me in each and every phase of the life. Whatever I am and wherever I am, is just because of the altruistic love of my parents. Their prayers have made me strong enough to face every problem and difficulty of the life.

TABLE OF CONTENTS

Declaration	iii
ABSTRACT	iv
ACKNOWLEDGMENTS	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES	viii
LIST OF FIGURES	ix
List of abbreviations	x
CHAPTER I: INTRODUCTION.....	1
1.1 Rationale	6
1.2 Objectives	6
CHAPTER II LITERATURE REVIEW	7
2.1 General Education Attitudes	7
2.2 Special education attitudes:.....	7
2.3 Administrative attitudes	8
2.4 Teachers self-efficacy in inclusive education practice	8
2.5 Relationship between teacher’s self-efficacy and attitude.....	8
2.6 Cultural differences and inclusive education	9
2.7 Importance of training for educators in inclusive education	9
2.8 Challenges to implement inclusive education.....	9
2.8 Operational definitions.....	10
CHAPTER III: METHODOLOGY	11
3.1. Research design	11
3.2. Study duration.....	11
3.3. Study setting.....	11
3.4. Research participants	11
3.4.1. Inclusion criteria	11
3.4.2. Exclusion criteria	11
3.5. Sampling strategy.....	11
3.6 Data collection instrument	12
3.6.1. Questionnaire design.....	12
3.7 Study variables.....	14.
3.8. Data collection process	14
3.8.1. Pilot testing	14
3.8.2. Formal data collection.....	14
3.9. Data analysis procedure	14
3.9.1 Descriptive analysis	15
3.9.2 Inferential analysis	15
310. Ethical considerations	15
CHAPTER IV RESULTS.....	16
4.1 Demographic characteristics of respondents:	16
4.2 Frequency and percentage of cognitive attitude of respondents:	18
4.3 Frequency and percentage of affective skills of respondents:	19
4.4 Frequency and percentage of behavioral skills of respondents:	20

4.6 Association of various demographic factors to affective attitude regarding inclusive education:	23
4.7 Association of various demographic factors to behavioral attitude regarding inclusive education:	24
4.8 Comparison of public and private schools:.....	25
CHAPTER 5 DISCUSSION.....	26
5.1 STRENGTHS	28
5.2 LIMITATIONS.....	28
CONCLUSIONS.....	30
RECOMMENDATIONS.....	31
REFERENCES	32
ANNEXURE A- QUESTIONNAIRE	36
ANNEXURE-B CONCENT FORM	39
ANNEXURE-C IRB LETTER.....	38
ANNEXURE-D BUDGET	459
ANNEXURE-E GANTT CHART.....	460

LIST OF TABLES

Table	Page
Table 1 Demographic characteristics of respondents	16
Table 2 Frequency and percentage of cognitive skills of respondents	18
Table 3 Frequency and percentage of Affective skills of respondents	20
Table 4 Frequency and percentage of behavioral attitude of respondents	21
Table 5 Association of demographic factors with cognitive attitude	22
Table 6 Association of variables with affective attitude of respondents	23
Table 7 Association of variables with behavioral aspects of respondents	24
Table 8 Comparison of public and private schools with attitude of respondents	25

LIST OF FIGURES

Figure	Page
Figure 1 Supporting inclusive education	2
Figure 2 Determinants of inclusive education	3
Figure 3 Data analysis steps.....	15
Figure 4 Gender distribution of Respondents	16
Figure 5 knowledge of Inclusion policy	18

List of abbreviations

UNICEF	United Nations International Children's Emergency Fund
NCLB	No Child Left Behind
NGO	Non-Government Organization
CWD	Children with Disability
SRCI's	School for Rehabilitation of Child Labor
UN	United Nations
IE	Inclusive Education

CHAPTER I: INTRODUCTION

The inclusive schooling is considered a belief or norm and an educational practice to make children learn with the fellows of same age in the same class. This includes all children either differently able, gifted students, children from different ethnic backgrounds and races or much more. However, this genuinely adds all children to learn in an effective learning environment. All the children in inclusive schooling have their own unique abilities, strengths and experiences and this makes the society richer when all the children are valued.(Stubbs 2008)

Inclusive schooling does not demand that all of the students learn same things at the same time and this is not the responsibility of the teacher. As it is not possible humanly to make them learn at the same pace as each individual has its own IQ (Intelligence Quotient). As Erwin states that;(Messiou 2017)

“The true essence of inclusion is based on the premise that all individuals with disabilities have a right to be included in naturally occurring settings and activities with their neighborhood, peers, siblings, and friends”.

Inclusive education is the most productive method of teaching so that equal chance should be given to children to develop and polish their skills. This means all children in the same classroom of the respective school learn the same stuff; the real learning opportunities. This system of education put emphasis on distinctive traits of students of all backgrounds and allow diverse groups to grow.(Moriña 2017)



Figure 1 Supporting inclusive education(Corbett 2002)

Inclusive education is major revolutionary education policy which was made to focus on education for all students across the globe. The literature suggests that discussions on special needs education in Spain at Salamanca Conference cleared the way for the advocacy of inclusive education in many countries. Therefore, the United Nations use to provide financial as well as technical assistance to low income countries to make their educational system better and promote inclusive education.(Martins, Harris et al. 2014)

The hallmark of inclusive education is a teacher as she has experience and willingness to accept children of different capabilities. For this, education and training of teachers is very important to achieve the goal of inclusive education.(Zollers, Ramanathan et al. 1999). Inclusive education enhances the social interactions among individuals and this directly removes the negative image of disabled children from society which affects the mental health of respective child and his parents or family members. Furthermore, if this inclusive education is focused in our society with the behavior change communication strategies, in the hierarchy from individual to government level, the issue of mental health could be minimized in a better way.(Love and Horn 2021)

Globally there is much emphasize given by UN to inclusive education. In the developed countries like USA, United Kingdom and the European Union member states there are separate schools for special students and other schools for the healthy children of society.(Lindner and Schwab 2020).These countries have proper implementation strategies and funding sources to the individual to cope up the needs of differently abled child either educational or health related through insurance and special need funds. In 2001 the No Child Left behind (NCLB) was

introduced to include students with special needs in the mainstream classroom and to assess the attitude of teachers and students both towards inclusive education. The programs made it binding for schools and teachers for all the curricular needs of students with appropriate special educational supports by the act (“Every Student Succeeds Acts” 2015) and the accommodations and supports are legally binding and if the school fails to provide all this than can be sued. So regarding teachers training the USA also provides quality trainings in special needs to deal with children in inclusive education.(Florian and Spratt 2013, Messiou 2017)

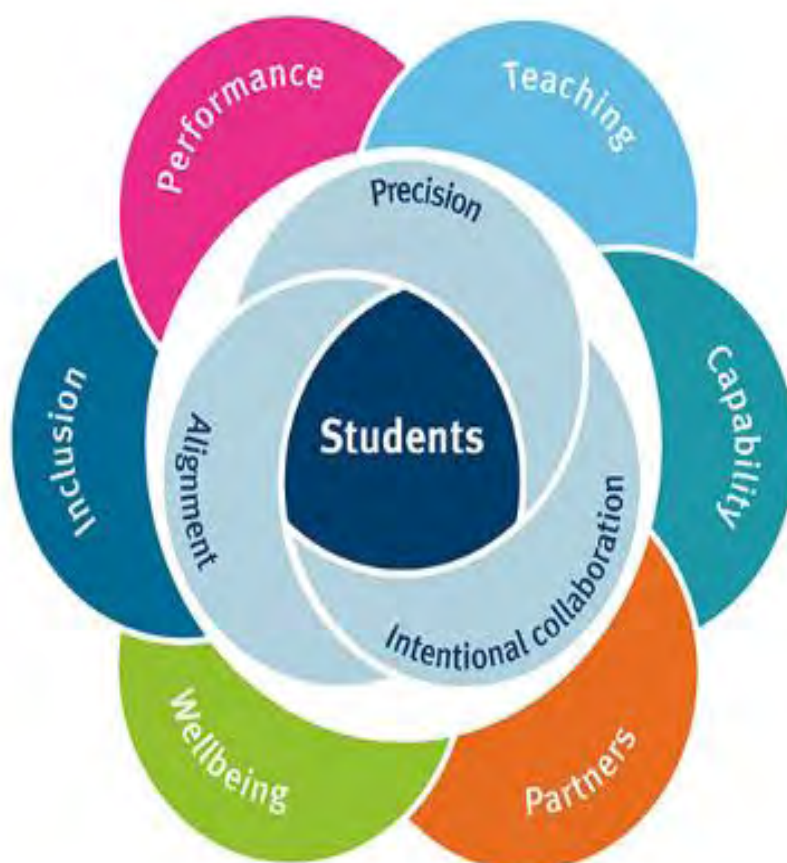


Figure 2 Determinants of inclusive education(Hellmich, Löper et al. 2019)

United Kingdom has also made some good progress in educational support of differently abled children and protects disabled students from being treated unfavorably by school. According to this Act it is unlawful for the schools to refuse the admission of impaired or differently abled child and the child must have access to school and curriculum. According to an estimate, in UK third of pupils with special needs are educated now in mainstream schools to promote inclusive education.(Graham 2020)

At regional level, some countries have separate schools for special children and schooling for healthy children called the mainstream school system. In these countries, the government with the aid of UNICEF and some International NGO's provide financial assistance for special education needs.(Akbarovna 2022) .There are specifically trained teachers for differently abled children. Teachers in Malaysia receive some basic training to support students with special needs. However, teachers often express that the lack of practical experience makes them less confident in supporting a student with special needs.(Hunt 2021).In Turkey, there is the same tendency to educate students with disabilities in mainstream schools, when possible. Special education is provided for children with mild, moderate, or severe learning disabilities. Special education is provided in three ways, in mainstream classrooms, in special education classrooms set and in segregated special education schools for children with more severe disabilities. So the inclusive education is not much common yet to minimize this gap from the society. (Ravenscroft, Davis et al. 2019).Same is the case with neighboring countries like India, China, and Bangladesh that separate educational institutes are there for healthy and differently abled children.(Akrim and Harfiani 2019)

At national level, there is limited concept of inclusive education as special children are much ignored in the country and they are not even sent to school for learning though there are some operational special education schools funded by the Government of Pakistan with the collaboration of United Nations agencies like UNICEF and some international NGO's like Care International and many more. However, with the collaboration of British council some pilot projects has been carried out in Pakistan and are still in progress to promote inclusive education.(Bose and Heymann 2020)

Currently, the studies on IE in Pakistan primarily focus on Children with Disabilities (CWDs) and their inclusion into mainstream schools. However, as the country further develops its emergent education policies and laws such as the National Education Framework 2018 (federal), the New Deal 2018-23 in Punjab, the new provincial Education Sector Plans 2019-2023 (in process of formulation) and the Inclusive Education Strategy Punjab are under process, well framed, contemporary studies and researches are needed to continue to inform, contextualize, advocate and implement IE within the country.(Derzhavina, Nikitina et al. 2021)

In Pakistan, inclusive education faces many problems with respect to gender and minorities group. There is also a major barrier of socioeconomic status which is persistent. A literature on inclusive education in Pakistan indicated that in south Punjab, parents prefer boys to get education and ignore the female gender for education, cultural practices, direct and indirect schooling cost. (Singal, Sabates et al. 2020).There is also an obstacle of separate schools for boys and girls which arise due to cultural and religious constraints. This is further added by lack of

schools in rural areas and issue of transport facilities as there are school which are far from residential areas and parents don't send their child to school. There is overall an issue of gender parity in Pakistan but Punjab, the capital of the country and some other areas do relatively better and promote education as well as inclusive education.(Rose, Singal et al. 2018). However, ensuring inclusivity for all necessitates the existence of key systems which do not always exist or do not function well. One such example is the lack of data on CWDs –the first step towards inclusivity is visibility -guaranteeing that everyone is visible in data. This is not possible unless adequate financing options are available which are then matched with comprehensive national strategies.(Singal 2015)

The try to make affective the inclusive education has been considered in Pakistan. A recently launched program by Federal government called the “EHSAS” focused on inclusion of out of school girls and women in the mainstream education system but the differently abled children are still not in the inclusive education by the Government laws. However, Child Support Program (for economically vulnerable children) and Schools for Rehabilitation of Child Labor (SRCLs) are all aimed at promoting inclusive education. Under the SRCs program, 159 centers have been established for non-formal primary education of children aged 5-6 years who were previously forced into hazardous labor. (Demchenko, Maksymchuk et al. 2021)

More recently, the Government of Punjab has also started the second-shift school program (Insaf Afternoon Schools Program) in 20 districts of the province as a step towards mainstreaming the out-of-school and most vulnerable children/adolescents into primary and post-primary schools while also providing free transportation facilities to students from far-flung areas of Bahawalpur district under its Punjab Schools Transport Program. This is an effort to increase the accessibility of schools for all children under the New Deal 2018-2023.(Amor, Hagiwara et al. 2019)

Inclusive education is about removing the barriers that exclude people from the education system. The review of the existing literature indicates that there are several challenges for the implementation of effective IE policy in Pakistan at both the macro and micro levels. The lack of a proper and explicit definition of what inclusive education constitutes is a fundamental challenge. IE is not well defined in either the Constitution or the laws or in the policies and plans across both federal and provincial levels.(Sharma, Armstrong et al. 2019)

The core of all of these issues is the lack of regular, credible and holistic data pertaining to different vulnerable groups in general and CWDs in particular. The Population Census (2017) was conducted after 19 years instead of the stipulated decade and recorded very inadequate, last minute and widely questioned information on persons with disabilities and transgender individuals.(Stepaniuk 2019) Moreover, no information was made available on ethnic

minorities in the provisional results of the census. The main issues in the implementation of IE in Pakistan are unclear definitions, lack of a systems-thinking; non-existent or limited official categories for vulnerable groups, cultural and economic constraints, lack of awareness and data gaps pertaining to vulnerable groups in the country. Despite this, many of these problems are tractable through research, legislation and policy planning and are being increasingly discussed in the context of inclusive education.(Collet, Joiko et al. 2022)

1.1 Rationale

The People with disabilities in Pakistan are ~ 5 million (only 14% employed while others reliant on family). Among them 43.4 % are children and 28.9% of these children are of school going age. Only 20% schools claim inclusive education.(Pasha 2012) The study seeks to sketch the attitude of teachers towards inclusive education in schools to suggest improvement in education system across the country by evidence.

1.2 Objectives

- To assess the attitudes of private and public primary school teachers toward inclusive education in Rawalpindi and Islamabad.
- To compare difference between attitudes of private and public school teachers.
- To associate sociodemographic variables to different attitudes among teachers.

CHAPTER II LITERATURE REVIEW

The early history of education system was based on institutionalization, segregation, mainstreaming and integration but the most important concern now a days is about to excel in teaching so that all of the children could be able to get same level of education and also equal opportunities for all the learners.

2.1 General Education Attitudes

For the inclusive education to work in an organized way there is a need of collaborative efforts and interests between all the educators i.e. between general and special education teachers. The society as a whole and the teachers, the hallmark of education system need to work together on curriculum and meet all the needs of students with disabilities. However, literature shows that often the attitude of educators can be a fundamental tool in success and failure of inclusive education programs.(Wilczenski 1992)

There are number of ways to promote the behavior of teachers towards inclusive education. Wilson (2000) confirmed that “teacher attitude can actually play a greater role in the educational placement of a student with disability”. In order to be successful in this, schools need to identify and address educator concerns before implementation of inclusion begins.

2.2 Special education attitudes:

As the general teachers have good attitude towards their students similarly the educators of special education also need to be normal with children who are disabled in order to be successful in implementing inclusive education. Furthermore, the special education teachers are trained in such a way that they focus on fulfilling the needs of special child and have the capacity to hold good attitude towards differently abled child. Special education teachers often feel that general education teachers are detached when dealing with inclusion and placing their student’s appropriately.(Tuncay and Kizilaslan 2022) The need for collaboration between general and special educators is essential if directives of inclusive education are to be met. A study focused on a small percentage of educators within a school district; and within those parameters it discussed how inclusion works, the practices for educator’s attitudes implementing inclusion, and strategies educators are using to implement inclusion. The special education teachers addressed this by stating that inclusion is allowing special education students to be included in a general education classroom setting with the support of a special education teacher.(Yakubova, Kellems et al. 2022)

2.3 Administrative attitudes

Not only do general educators and special educators play an important role in inclusive education, so does administration, more specifically the principal. However, well supportive they may be, attitude and commitment also plays an important role in at as well. As leaders of the school, they determine and implement decisions. In order for schools to become more successful in including students with special needs, attitudinal, organizational, and instructional changes must take place. A major player in the change process is the school principal. In order for inclusive education to be implemented into schools, researchers have studied different implementation methods for principals to use. One important trait noted was to be able to “plan and instruct. The principal must also have skills to create and support their staff. They must show a willingness to increase collaboration, cooperative learning, peer coaching, and curriculum modifications in order for inclusion to be successful for all key personnel. In order for it to be beneficial for staff, the decisions made through collaboration, must be recognized as appropriate for that group, at that moment, on that issue. All in all, the principal’s attitude and responsibility for inclusion to work at any school site is vital and important. In summarizing these attitudes on inclusive education, educators need to remember the intent to support children with disabilities.(Valeo 2008)

2.4 Teachers self-efficacy in inclusive education practice

The belief of educators in teaching capacity is most probably associated with their experience of inclusive practice. The literature review shows that the teachers with higher self-efficacy can hold more positive attitude for the inclusive education and they welcome the diversity of students from different ethnic backgrounds, they also have lower likelihood to exclude students from classroom as they have good self-efficacy. Researches show that teachers with more self-efficacy may also be more willing to teach differently able students with more passion in their own classroom by adjusting their goals to cope up the student’s needs and they seem more positive in implementing new strategies for making inclusive education common.(Seneviratne, Hamid et al. 2019)

A study was conducted in Australia about the relationship between in-service teacher’s use of inclusive education and their teaching self-efficacy which shows that teachers with high sense of self efficacy employed more inclusive practices. (Fermín-González 2019)

2.5 Relationship between teacher’s self-efficacy and attitude

As the concept of inclusive education is on rise globally and this seems to be growing interest for what is to be required by the educators for self-efficacy in main stream class rooms. Many researches have been conducted which measures the relationship of teacher’s self-efficacy and inclusive education with the diversity of students.

The study conducted in china shows that training programs must be conducted for teachers to develop self-efficacy in teachers like collaboration skills, behavior management and class room instruction. In many countries, only the faculty of special education institutes get this training to teach pupils with disabilities and their training is carried out separately from mainstream teachers. The study suggests that attitude of future teachers if trained may be more favorable towards inclusive education.(Choi, Lee et al. 2019)

2.6 Cultural differences and inclusive education

The movement of inclusive education has been a cornerstone of contemporary educational reforms globally. Unfortunately, the minority cohort has been affected most, study says they are ignored on the basis of culture, language, and ethnicity and so on. The students who are minority in the classroom are neglected by teachers as well as their peers which has a negative effect on the mental health of student.(Fermín-González 2019). To overcome this issue educator must be trained so they come to recognize that they are living in what call the “cultural borderlands”. With this, individuals including teachers and students would more likely be intersecting with people from various races and ethical backgrounds. The teachers who are into inclusive education need to explore how their own cultural codes have impacted their teaching pedagogy and their beliefs about linguistically diverse groups and differently able children.(Nilholm 2021)

2.7 Importance of training for educators in inclusive education

A UNESCO report has highlighted the importance of preparing teachers for inclusive education. The report suggests that educators perceive the need to be trained for inclusive education employment, which is an urgent challenge for education system in the world. If urgent measures are not adopted and investment is not increased, the learning crises could turn into an educational catastrophe and the mental health issue too.(Demchenko, Maksymchuk et al. 2021)

2.8 Challenges to implement inclusive education

Inclusive education brings all the teachers and students together in one class room and community to minimize their weaknesses so that their potentials could be maximized. There are some major barriers to words the implementation of inclusive education; lack of support of parents, poor collaboration of local community, inadequate of teachers training, inflexible curriculum, inappropriate communication, lack of inclusive learning environment, social and cultural stereotypes, misinterpreting the concept of inclusive education, lack of recognition of people experiencing disability.(Carrington, Tangen et al. 2019)

2.8 Operational definitions

2.8.1 Inclusive education

The method of educating children together in one class irrespective of their capabilities.

2.8.2 Educational institutes

Educational institutes are the platform which provides education related services to individuals.

2.8.3 Cognitive attitude

This is defined as thought perception or idea of teachers towards inclusive education for children.

2.8.4 Affective attitude

This relates to the feeling or emotions in shaping teacher's attitude inclusive education in schools.

2.8.5 Behavioral attitude

This refers to the way teachers behave with students in inclusive education institutes.

CHAPTER III: METHODOLOGY

3.1. Research design

A quantitative research approach using cross sectional study was carried out to assess the teacher's attitude towards inclusive education in private and public schools of Rawalpindi / Islamabad, Pakistan.

3.2. Study duration

Study period for the current research was six months from September 2022 to February 2023.

3.3. Study setting

The study was conducted in Rawalpindi / Islamabad, which are the metropolitan cities of Pakistan located in North Punjab. The private schools include Siddique public school RWP/Islamabad. The public schools include Girls High School Talab Pukhtap Banni and FJ junior public school Kashmir road Rawalpindi. These schools are home to diverse students.

3.4. Research participants

The research participants were teachers who were present in the schools during the data collection and those who met the inclusion and exclusion criteria.

3.4.1. Inclusion criteria

1. All school teachers
2. Teachers of all age groups

3.4.2. Exclusion criteria

1. All visiting faculty members
2. Teacher's with physical disability

The sample size of 318 was calculated by using proportion formula with previous study. (Ahmad, Reba et al. 2020)

$n = \frac{z^2 p q}{e^2}$	
70% prevalence	$z = 1.96$ at 95%CI
$e = 5\%$	
Sample(n)=318±5%	

3.5. Sampling strategy

Desired sample was collected using convenient sampling strategy from teachers in Public and private schools of Rawalpindi/ Islamabad.

3.6 Data collection instrument

3.6.1. Questionnaire design

Data was collected using a self-administered questionnaire. The First Section including History based questionnaire consisting of demographic part age, gender, and work experience. The Second section including Standard Questionnaire (MATIES) Multidimensional attitude towards inclusive education. It Consists of 18 questions and has 3 subscales (cognitive, affective, behavioral). The scale assesses the attitudes of respondents regarding inclusive education with respect to cognitive, affective and behavioral attitudes by different questions. This scale consists of five point Likert scale from strongly agree to strongly disagree. The tool has a Crohn's back alpha of 0.84.

Cognitive

I believe that an inclusive school is one that permits academic progression of all students regardless of their ability.

I believe that students with a disability should be taught in special education schools.

I believe that inclusion facilitates socially appropriate behaviour amongst all students.

I believe that any student can learn in the regular curriculum of the school if the curriculum is adapted to meet their individual needs.

I believe that students with a disability should be segregated because it is too expensive to modify the physical environment of the school.

I believe that students with a disability should be in special education schools so that they do not experience rejection in the regular school.

Affective

I get frustrated when I have difficulty communicating with students with a disability.

I get upset when students with a disability cannot keep up with the day-to-day curriculum in my classroom.

I get irritated when I am unable to understand students with a disability.

I am uncomfortable including students with a disability in a regular classroom with other students without a disability.

I am disconcerted that students with a disability are included in the regular classroom, regardless of the severity of the disability.

I get frustrated when I have to adapt the curriculum to meet the individual needs of all students.

Behavioural

I am willing to encourage students with a disability to participate in all social activities in the regular classroom.

I am willing to adapt the curriculum to meet the individual needs of all students regardless of their ability.

I am willing to physically include students with a severe disability in the regular classroom with the necessary support.

I am willing to modify the physical environment to include students with a disability in the regular classroom.

I am willing to adapt my communication techniques to ensure that all students with an emotional and behavioural disorder can be successfully included in the regular classroom.

I am willing to adapt the assessment of individual students in order for inclusive education to take place.

Figure 3 MATIES Questionnaire(Corbett 2002)

3.7 Study variables

Independent Variables: Age, Gender, Private or Public School, City (Rawalpindi/Islamabad), Education, Years of teaching experience

Dependent Variables: Attitudes regarding Inclusive education; cognitive, affective, behavioral.

3.8. Data collection process

3.8.1. Pilot testing

Pilot testing was performed before starting the formal data collection procedure by including 10% of the actual sample size. Tool was tested for any future changes. After pilot study, no changes were made in the questionnaire. Data from pilot testing was not included in final analysis.

3.8.2. Formal data collection

Data was collected by the researcher herself and no data collectors were hired. All the teachers of selected schools were approached for data collection who met the inclusion criteria. Written consent forms were signed by the teachers who were taking part in research. After taking consent, respondents were given questionnaires to fill. Data collection was completed in almost two months. All the questionnaire was kept safe and no one had access to them other than researcher.

3.9. Data analysis procedure

Data was coded and was entered in Statistical Package for Social Sciences (SPSS) version 17. After careful data entry, data was checked for any error before proceeding to the further analysis. After data cleaning, data transformation was carried out for certain variables. Data analysis was done in two phases; descriptive analysis and inferential analysis.

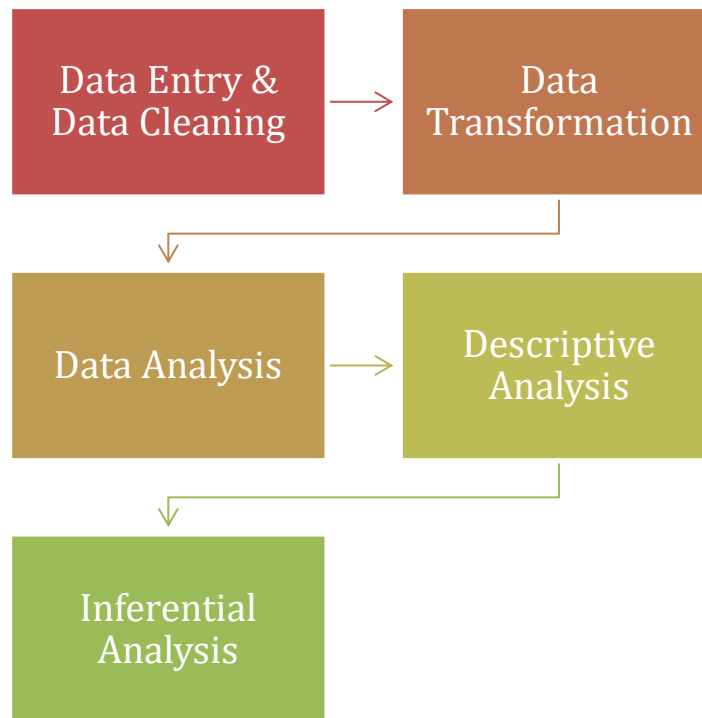


Figure 4 Data analysis steps

3.9.1 Descriptive analysis

Descriptive statistics was generated for socio demographic characteristics. For categorical variables, data was summarized in the form of frequencies and percentages and presented in table form, Bar chart and Pie chart.

3.9.2 Inferential analysis

The second phase of analysis was on inferential statistics. Association of teacher's attitude towards inclusive education for their cognitive, behavioral and affective attitude was determined with socio demographic variables using Pearson chi square test of independence. The p-value <0.05 was considered significant.

3.10. Ethical considerations

Before starting formal data collection, approval from Institutional Review Board (IRB) of Al-Shifa School of Public Health Rawalpindi, Pakistan was taken. Permission letter from the Head of Department of Al-Shifa School of Public Health was obtained regarding access to public and private schools. Permission was also taken from the administration department of schools for conducting research. The teachers were explained the purpose of the research and written consent was taken from each participant. Participants were assured for the confidentiality of their data. Data collected from the respondents was kept anonymous and was not shared with anyone. Data was entered in SPSS anonymously.

CHAPTER IV RESULTS

4.1 Demographic characteristics of respondents:

A total of 318 respondents were included in the study. Regarding gender of respondents 34.2% were of the males and 65.5% were females. About the age of respondents 24.8% were in the age bracket of 23 to 27 years, 22% were with the age of 28 to 32 years, 25.5 % were with the age of 33 to 37 years and 27.7 % with the age of 38 years and above. Regarding qualification of respondents 37.4 % hold a graduation degree, 34.3 % had master's degree and 28.3% had post graduate diploma. About teaching experience of respondents 16.7% had 0 to 3 years of experience, 26.4 % had 4 to 6 years of experience, and 35.8% had 7 to 9 years of experience and 21.1 % had more than 10 years of experience.

Forty-six percent of the respondents were from Rawalpindi and 53.5% were from Islamabad. About 33.3 % were teaching at Montessori level, 35.5 % at primary level and 31.1 % at secondary level. Fifty percent of the respondents had contact with disabled child and 48.1 % got training about inclusive education. About 56.3 % had knowledge about inclusion policy/ legislation. Thirty-four percent of respondents had low confidence to teach in inclusive educational institutes, 33.3% had average confidence level. About 29.9% respondents had some level of experience and 18.2% had better experience.

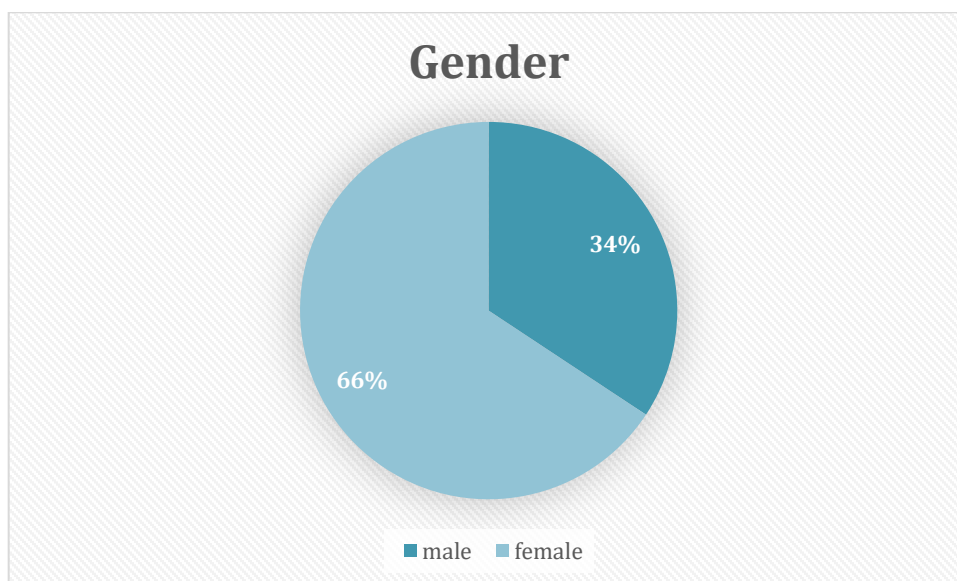


Figure 5 Gender distribution of Respondents

Table 1 Demographic characteristics of respondents

Variables		Public schools		Private schools		
		Cumulative %	Frequency	%	Frequency	%
Age	23 to 27 years	24.8	27	16.6	52	33.9
	28 to 32 years	22	46	27.8	24	15.6
	33 to 37 years	25.5	60	36.3	21	13.7
	38 and above	27.7	32	19.9	56	36.6
Qualification	Graduation	37.4	90	54.5	29	18.9
	Masters	34.3	63	38.1	46	30
	PG diploma	28.3	12	7.2	78	50.9
Teaching experience	0-3 years	16.7	48	29	5	3.2
	4-6 years	26.4	21	12.7	63	41.1
	7-9 years	35.8	41	24.8	73	47.7
	10 years and above	21.1	55	33.3	12	7.8
City	Rawalpindi	46.5	78	47.2	70	45.7
	Islamabad	53.5	87	52.7	83	54.2
Grade of teaching	Montessori	33.3	78	47.2	28	18.3
	Primary level	35.5	63	38.1	50	32.6
	Secondary level	31.1	24	14.5	75	49
Contact with disabled child	yes	50	110	66.6	49	32
	No	50	55	0	104	67.9
Get teaching training	Yes	48.1	0	0	153	100
	No	51.9	165	100	0	0
Confidence level to teach	Low	34.9	59	36.1	52	33.9
	Average	33.3	63	38.6	43	28.1
	High	31.8	43	26.3	58	37.9
Level of experience	Nil	51.9	152	92.1	13	8.4
	Some	29.9	13	7.8	82	53.5
	High	18.2	0	0	58	37.9

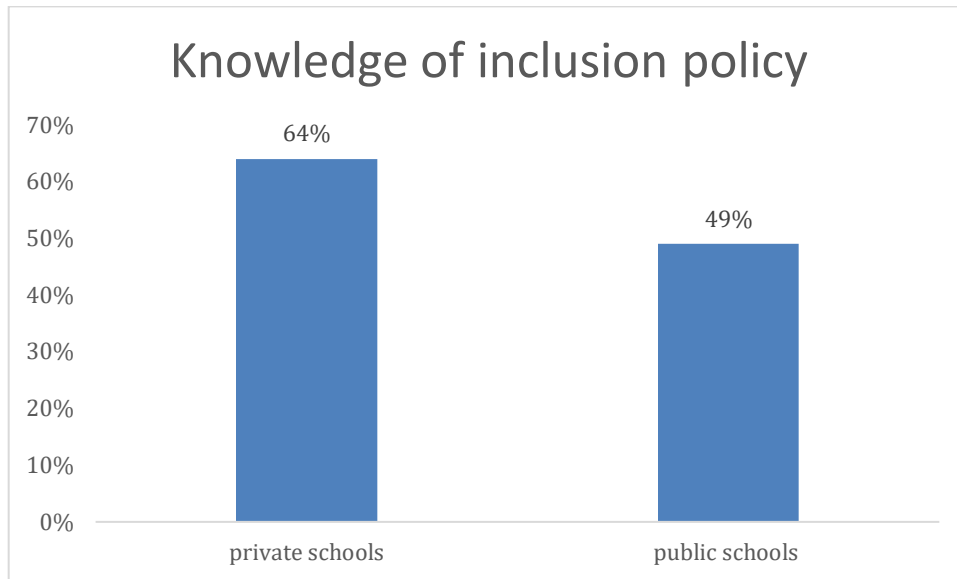


Figure 6 knowledge of Inclusion policy

4.2 Frequency and percentage of cognitive attitude of respondents :

About cognitive skills of respondents 50.3% from public schools and 49.6% from private schools agreed that inclusive schools permit academic progression of students regardless of their ability. About 72.7 % respondents from public and 60.7% from private schools were neutral about the facts that disabled students should be taught in special education schools. About 50.9% respondents from public schools and 58% from private schools strongly agreed that inclusion facility socially appropriate behaviors among all students. Forty-five percent of respondents from public and 76.4% from private schools agreed that students can learn in regular curriculum of school if it is adapted to meet individual needs. About 66.6 % from public schools and 56% from private schools were neutral about the segregation of disabled students from healthy. About 73.3% from public and 48.3% from private schools disagreed about admission of students to special education institutes so that they may not experience rejection in regular school.

Table 2 Frequency and percentage of cognitive skills of respondents

Variables		Public schools		Private schools	
		Frequency	%	Frequency	%
Inclusive school permits academic progression	Strongly agree	74	44.8	76	49.6
	Agree	83	50.3	65	42.4
	Neutral	2	1.2	4	2.6
	Disagree	6	13.6	0	0
	Strongly disagree	0	0	8	5.2
Students with disability should be taught in special education	Strongly agree	0	0	5	3.2
	Agree	0	0	7	4.5
	Neutral	45	27.2	93	60.7
	Disagree	120	72.7	42	27.4
	Strongly disagree	0	0	6	3.9
Inclusion facilities socially appropriate behavior	Strongly agree	84	50.9	89	58.1
	Agree	75	45.4	52	33.9
	Neutral	0	0	5	3.2
	Disagree	0	0	6	3.9
	Strongly disagree	6	3.6	1	0.6
Adapted curriculum to meet needs	Strongly agree	74	44.8	36	23.5
	Agree	75	45.4	117	76.4
	Neutral	5	3	0	0
	Disagree	5	3	0	0
	Strongly disagree	6	3.6	0	0
Segregation of disabled students	Strongly agree	5	3	0	0
	Agree	14	8.4	33	21.5
	Neutral	110	66.6	87	56.8
	Disagree	36	21.8	28	18.3
	Strongly disagree	0	0	5	3.2
Disabled students should be in special education schools	Strongly agree	0	0	5	3.2
	Agree	0	0	4	2.6
	Neutral	44	26.6	65	42.4
	Disagree	121	73.3	74	48.3
	Strongly disagree	0	0	5	3.2

4.3 Frequency and percentage of affective skills of respondents :

About affective psychology of respondents 50% respondents from public and 54% from private schools were neutral about the fact that they get frustrated when they had to teach disabled child. About 54.5% from public schools were neutral and 50.9% from private schools agreed that they get upset when students cannot keep up with them in the classroom. Forty eight percent respondents from public schools were neutral and 60% from private schools agreed that they get irritated when they come in contact with disabled child. About 55.7% respondents from public schools were neutral and 58.8% respondents from private schools disagreed that they feel uncomfortable including students in regular classroom when they get in contact with disabled child. Thirty-eight percent from public schools and 41% from private schools were neutral that they disconcerted that students with a disability are included in a regular classroom with others without disability. About 44.2% students from public schools and 47.7% from private schools

were neutral as they get frustrated when they have to adapt the curriculum to meet the individual needs of all students.

Table 3 Frequency and percentage of Affective skills of respondents

Variables		Public schools		Private schools	
		Frequency	%	Frequency	%
Get frustrated when communicating	Strongly agree	0	0	6	3.9
	Agree	2	1.2	4	2.6
	Neutral	83	50.3	83	54.2
	Disagree	75	45.4	60	39.2
	Strongly disagree	5	3	0	0
Get upset when students cannot keep up with curriculum	Strongly agree	3	1.8	4	2.6
	Agree	72	43.6	78	50.9
	Neutral	90	54.5	61	39.8
	Disagree	0	0	5	3.2
	Strongly disagree	0	0	5	3.2
Get irritated when cannot understand students	Strongly agree	2	1.2	4	2.6
	Agree	73	44.2	92	60.1
	Neutral	80	48.4	57	37.2
	Disagree	5	3	0	0
	Strongly disagree	5	3	0	0
Uncomfortable with disabled students in regular class	Strongly agree	7	4.2	0	0
	Agree	9	5.4	0	0
	Neutral	92	55.7	56	36.6
	Disagree	57	34.5	90	58.8
	Strongly disagree	0	0	7	4.5
Disconcerted about healthy and special students in class	Strongly agree	5	3	1	0.6
	Agree	31	18.7	50	32.6
	Neutral	63	38.1	63	41.1
	Disagree	66	40	31	20.2
	Strongly disagree	0	0	8	5.2
Get frustrated to adapt curriculum for special children	Strongly agree	5	3	5	3.2
	Agree	45	27.2	45	29.4
	Neutral	73	44.2	73	47.7
	Disagree	28	16.9	28	18.3
	Strongly disagree	2	1.2	2	1.3

4.4 Frequency and percentage of behavioral skills of respondents:

About the behavioral aspects of scale 56% from public schools strongly agreed and 47% from private schools agreed that they remain willing to encourage students with a disability to participate in all social activities in the regular classroom. About 51% students from public schools strongly agreed and 48.3% from private schools agreed that are willing to adapt the curriculum to meet the individual needs of all students regardless of their ability. About 49% respondents from public schools and 53% from private schools were neutral about willingness to modify the physical environment to include students with a disability in regular classroom. Forty-nine percent respondents from public and 53.5% from private schools agreed about their

willingness to adapt communication techniques to ensure that all students with an emotional and behavioral disorder can be successfully included in the regular classroom. About 43.6% from public schools and 49.8 % from private schools were neutral about willingness to adapt the assessment of individual students in order for inclusive education to take place.

Table 4 Frequency and percentage of behavioral attitude of respondents

Variables		Public schools		Private schools	
		Frequency	%	Frequency	%
Willing to encourage students with disability	Strongly agree	94	56	63	41.1
	Agree	71	43	72	47
	Neutral	0	0	5	3
	Disagree	0	0	5	3
	Strongly disagree	0	0	8	5.2
Willing to adapt the curriculum to meet individual needs	Strongly agree	85	51	73	47.7
	Agree	63	38.1	74	48.3
	Neutral	1	0.6	6	3.9
	Disagree	7	4.2	0	0
	Strongly disagree	9	5.4	0	0
Willing to physically include students with disability	Strongly agree	5	3	0	0
	Agree	5	3	0	0
	Neutral	79	47.8	65	42.4
	Disagree	71	43	88	57.5
	Strongly disagree	5	3	0	0
Willing to modify the physical environment of class	Strongly agree	5	3	0	0
	Agree	6	3.6	0	0
	Neutral	81	49	82	53.5
	Disagree	69	41.8	70	45.7
	Strongly disagree	4	2.4	1	0.6
Willing to adopt affective communication techniques	Strongly agree	5	3	5	3
	Agree	82	49.6	82	53.5
	Neutral	49	29.6	49	32
	Disagree	12	7.2	12	7.8
	Strongly disagree	5	3	5	3
Willing for assessment of individual student	Strongly agree	0	0	7	4.5
	Agree	43	26	31	20.2
	Neutral	72	43.6	61	39.8
	Disagree	44	26.6	54	35.2
	Strongly disagree	6	3.6	0	0

Inferential statistics

4.5 Association of various demographic factors to cognitive aspect regarding inclusive education:

Chi Square Test of Independence after confirming the assumptions of the test was applied. All p-values below 0.05 were considered statistically significant. The summary of association of variables and reported cognitive aspects of scale is given below. Results of the Chi square analysis show that cognitive ability of respondents with teaching experience, training to teach in inclusive education, confidence level, experience level of teaching, qualification of respondents, contact of respondents with disabled children, teaching grades and educational institute either public or private shows **p-value less than 0.05** which is statistically significant.

Table 5 Association of demographic factors with cognitive attitude

variables	Category	Negative	Positive	Chi square	df	p-value
Gender	Male	17	92	2.98	1	0.08
	Female	50	159			
Teaching experience	0-3years	21	32	33.2	3	0.001
	4-6years	1	83			
	7-9years	26	88			
	>10years	19	48			
Training	Yes	22	131	7.93	1	0.005
	No	45	120			
Knowledge about policy and legislation	Yes	30	149	4.57	1	0.03
	No	37	102			
Confidence level	Low	38	73	19.7	2	0.001
	Average	19	87			
	High	10	91			
Experience level	Nil	44	121	11.9	2	0.003
	Some	20	75			
	High	3	55			
Qualification	Graduation	60	59	98.6	2	0.001
	Masters	5	104			
	PG dip	2	88			
Contacted disabled	Yes	47	112	13.7	1	0.001
	No	20	139			
Teaching grade	Montessori	34	72	12.9	2	0.002
	Primary	21	92			
	Secondary	12	87			
Educational institute	Public	45	120	7.93	1	0.005
	Private	22	131			

*p-value<0.05 is significant

4.6 Association of various demographic factors to affective attitude regarding inclusive education.:

Chi Square Test of Independence after confirming the assumptions of the test was applied. All p-values below 0.05 were considered statistically significant. The summary of association of variables and reported cognitive aspects of scale is given below. The scale was computed, 0 and 1 was taken as negative and positive attitudes respectively. Results of the Chi square analysis show that behavioral ability of respondents with gender, teaching experience, training to teach in institutions promoting inclusive education, knowledge of respondents about policy and legislation about inclusive education, experience level, qualification of respondents, contact of respondents with disabled child, grade of teaching and educational institute shows **p-value less than 0.05** which is statistically significant.

Table 6 Association of variables with affective attitude of respondents

variables	Category	Negative	Positive	Chi square	df	p-value
Gender	Male	23	86	5.91	1	0.01
	Female	23	186			
Teaching experience	0-3years	10	43	12.6	3	0.005
	4-6years	19	65			
	7-9years	15	99			
	>10years	2	65			
Training	Yes	37	116	22.5	1	0.001
	No	9	156			
Knowledge about policy and legislation	Yes	32	147	3.85	1	0.05
	No	14	125			
Confidence level	Low	11	100	2.86	2	0.2
	Average	18	88			
	High	17	84			
Experience level	Nil	17	148	5.69	2	0.05
	Some	20	75			
	High	9	49			
Qualification	Graduation	9	110	36.1	2	0.001
	Masters	7	102			
	PG dip	30	60			
Contacted disabled	Yes	15	144	6.50	1	0.01
	No	31	128			
Teaching grade	Montessori	10	96	8.42	2	0.01
	Primary	25	88			
	Secondary	11	88			
Educational institute	Public	9	156	22.5	1	0.001
	Private	37	116			

P-value<0.05 is significant

4.7 Association of various demographic factors to behavioral attitude regarding inclusive education:

Chi Square Test of Independence after confirming the assumptions of the test was applied. All p-values below 0.05 were considered statistically significant. The summary of association of variables and reported cognitive aspects of scale is given below. The scale was computed, 0 and 1 was considered negative and positive attitudes respectively. Results of the Chi square analysis show that behavioral ability of respondents with gender, experience level, qualification of respondents and grade of teaching shows **p-value less than 0.05** which is statistically significant.

Table 7 Association of variables with behavioral aspects of respondents

variables	Category	Negative	N	Chi square	df	p-value
Gender	Male	46	63	12.7	1	0.001
	Female	48	161			
Teaching experience	0-3years	12	41	27.4	3	0.001
	4-6years	25	59			
	7-9years	51	63			
	>10years	6	61			
Training	Yes	48	105	0.46	1	0.49
	No	46	119			
Knowledge about policy and legislation	Yes	53	126	0.00	1	0.98
	No	41	98			
Confidence level	Low	30	81	4.12	2	0.12
	Average	39	67			
	High	25	76			
Experience level	Nil	39	126	8.07	2	0.01
	Some	30	65			
	High	25	33			
Qualification	Graduation	18	101	20.3	2	0.001
	Masters	38	71			
	PG dip	38	52			
Contacted disabled	Yes	44	155	0.54	1	0.46
	No	50	109			
Teaching grade	Montessori	16	90	17.8	2	0.001
	Primary	37	76			
	Secondary	41	58			
Educational institute	Public	46	119	0.46	1	0.49
	Private	48	105			

P-value<0.05 is significant

4.8 Comparison of public and private schools:

Chi square test was run to compare cognitive, affective and behavioral aspects of scale with teaching institutes which are public or private. The scale was computed, 0 and 1 was taken as negative and positive attitude respectively. The cognitive behavior shows that more respondents from public schools have positive attitude, the affective behavior shows that more respondents from public schools depicts negative attitude and behavioral attitude suggests that more respondents from public schools shows negative attitude towards inclusive education.

In this comparison the educational institutes with cognitive aspect of scale only shows significant results **Chi square= 7.93 (1), p-value 0.005**.

Table 8 Comparison of public and private schools with attitude of respondents

Variable		Public	Private	Chi square	df	p-value
Cognitive	Positive	45	22	7.93	1	0.005
	Negative	120	131			
Affective	Positive	46	48	0.46	1	0.49
	Negative	119	105			
Behavioral	Positive	46	48	0.46	1	0.49
	Negative	119	105			

p-value<0.05 is significant

CHAPTER 5 DISCUSSION

Inclusive education is the major concern of today's educational system in developing countries. The study aimed to find out the public and private school teachers attitude towards inclusive education as well as their cognitive, affective and behavioral concerns towards inclusive education with age, gender, level of experience, qualification and knowledge about inclusion legislation and policy. The current study is quantitative.

This study reveals that more female teachers were employed in public schools and the age range of them was from 33 to 37 years. Most of the teachers were holding Post graduate diplomas. And most of the teachers were having 7 to 9 years of experience. A similar study was conducted which shows similar results to our study shows that there were more number of female teachers in educational institutions with an age bracket of 25 to 30 year.(Liasidou 2012)

The study shows that experience effects attitude of teachers , the teachers who had more experience were having less negative attitudes towards inclusive education irrespective of young teachers with less experience. The study reveals that more teachers from public schools have less experience regarding inclusive education. Furthermore, private school teachers seems to have more confidence level then public school teachers regarding inclusive education. Another study reveals the similar results and shows that the educators who got training and had knowledge about the inclusion policy or who had teaching experience with in special educational institutes had less negative attitudes towards inclusive education and they are willing to adapt their behavior to include students with disabilities in regular class room.(Xue, Chai et al. 2023)

This study underlines that grades of teaching had significant effect on the inclusive education, as the teachers who use to teach in secondary grades of classes have less negative attitude towards inclusive education then of primary or Montessori level. Another study depicts that teachers who got training for inclusive education have positive attitudes to teach disabled individual irrespective of grades. (Klimecká 2023)

The study revealed that teachers seem to be neutral about their concerns towards inclusive education, regarding their ability to give appropriate attention to all students in an inclusive classroom and having the knowledge and skills required to teach students with disabilities. In contrast to previous research, negative attitudes might exist towards students with special educational needs and inclusion because general education teachers lack the appropriate knowledge, support, and assistance needed to effectively meet all the needs of their students.(Afrianty 2023)

The comparison between teachers of public and private education indicated that teachers of private education have lower negative sentiments towards children with disabilities, lower levels of concern about inclusive education, and higher positive attitudes about including students with different kinds of problems in the regular classroom. On the other hand, an older study showed that general class teachers had a neutral attitude towards inclusion but were more positive than special education teachers.

Furthermore, teachers aged 41–45 indicated a mixed approach, presenting high levels of positive attitudes and concerns towards inclusive education.(Demchenko, Maksymchuk et al. 2021)

Considering gender, the study revealed similar levels of negative sentiments towards people with disabilities and concerns toward inclusive education between males and females. However, significantly, females presented higher levels of positive attitudes towards inclusive education than males. Several studies are in complete agreement with our findings that women tend to have a more positive attitude towards people with special educational needs and/or disabilities.(Derzhavina, Nikitina et al. 2021)

Regarding teaching experience in general education, lower levels of negative sentiments and concerns towards people with disabilities appeared for teachers with 2–5 years of teaching experience, while higher levels for teachers with over 10 years of experience. In addition, high levels of concern towards inclusive education were indicated for teachers with minimum experience of 0–1 years in general education while lower levels of positive attitudes towards inclusive education were presented for teachers with extensive teaching experience in general education over 15 years.(Messiou 2017)

This study showed that teachers who had more than 10 years of teaching experience changed their perception and attitude about inclusive education irrespective of the fact that they got training in special education or know about the legislation and inclusion policy. Another study showed that teachers who taught for 12 years or more, really struggled to change their perceptions about effective teaching methods and highlighted that the inability to adapt the methods of teaching can lead to increased stress for teachers, which could potentially lead to negative perceptions about inclusive education. (Fermín-González 2019)

As far as teaching experience in special education is concerned, lower levels of negative sentiments towards people with disabilities were presented for teachers with over 10 years of teaching experience in special education. Higher levels of concern towards inclusive education were indicated for teachers with 0–5 years of teaching experience in special education. Our results support a recent study in Portugal, which indicated that special education teachers with more experience to use the support material, had more positive attitudes toward inclusive education. (Seneviratne, Hamid et al. 2019)

Interestingly, training in special education affected the attitudes of teachers towards inclusive education. In particular, teachers who are trained in special education indicated lower levels of negative sentiments towards people with disabilities, lower levels of concern, and higher positive attitudes towards inclusive education. In addition, teachers who have at least one kind of training presented more positive attitudes towards inclusive education.

This is inconsistent with studies that have shown that professional development courses/seminars on inclusive education have led to less resistance to practices without exclusions from teachers and in reducing the stress levels of teachers when facing inclusion. Furthermore, teachers with prior knowledge of inclusive education in general education and in-service training were shown to have a more favorable attitude toward participatory education than teachers who did not obtain this knowledge. So teachers should have extensive training in the management of students' emotional and behavioral problems in the classroom, trying to overcome barriers in the classroom.

Inclusive education is the major issue among public and private educational institutes of Pakistan. It is a serious issue to be addressed by the education ministries. A study from private and public schools and data from it shows that there is a need to train the faculty of public schools to implement inclusive education all over Pakistan.

5.1 STRENGTHS

The current study has used validated tool MAITES for assessment of attitude of inclusive education among public and private school teachers. This tool was widely used before in studies. Moreover, the current study is somehow successful in measuring the attitude of teachers. This study has also identified some other factors like experience level, training regarding inclusive education, contact with disabled child, confidence level, teaching grade and teaching experience. In addition, the current study measured the prevalence of inclusive education in schools. The findings of this study can be generalized to the similar population from other parts of Pakistan due to similar contextual factors.

5.2 LIMITATIONS

Despite the sincere efforts of the researcher, a few limitations were still present in this study, Firstly, it was a cross sectional study and hence no causal relationship can be established in this

study. It is important to mention that there were no previous studies for comparison to assess the attitude of teachers towards inclusive education.

CONCLUSION

The present study has shown that trained teachers of special education who have more than 10 years of experience in special education, as well as teachers of 36–40 years and teachers with 2–5 years of teaching experience in general education, presented a more positive stance on inclusive education and females and teachers of private schools presented higher levels of positive attitudes towards inclusive education.

RECOMMENDATIONS

Based on the results of our study, we make the following two recommendations to generalize the use the concept of inclusive education in Pakistan. First, we recommend that an advertising campaign be implemented to promote the new services to be offered by the government and community schools regarding inclusive education so that it could be done at all levels of hierarchy by behavior change communication strategy.

Second, we recommend that an educational campaign be developed and employed for training teachers about inclusive education.

To successfully implement these recommendations, the collaboration between the government and the private school's authorities is needed. Moreover, the more sophisticated support of the role of parents is also considered.

There should be serious efforts to provide training by different means to enhance the role of teachers in inclusive education.

REFERENCES

- Afrianty, D. (2023). "15 Disability Rights and Inclusive Education in Islamic Tertiary Education." *Islam, Education and Radicalism in Indonesia: Instructing Piety*.
- Ahmad, S., et al. (2020). "Comparison between the perceptions of primary school teachers towards inclusive education in Peshawar, Pakistan." *Journal of the Social Sciences* 48(3).
- Akbarovna, a. s. (2022). "inclusive education and its essence." *international journal of social science & interdisciplinary research issn: 2277-3630 impact factor: 7.429 11(01): 248-254*.
- Akrim, M. and R. Harfiani (2019). "Daily learning flow of inclusive education for early childhood." *Utopia Y Praxis Latinoamericana* 24(6): 132-141.
- Amor, A. M., et al. (2019). "International perspectives and trends in research on inclusive education: A systematic review." *International journal of inclusive education* 23(12): 1277-1295.
- Bose, B. and J. Heymann (2020). "Do inclusive education laws improve primary schooling among children with disabilities?" *International Journal of Educational Development* 77: 102208.
- Carrington, S., et al. (2019). *Inclusive education in the Asia Indo-Pacific region*, Taylor & Francis. 23: 1-6.
- Choi, J., et al. (2019). "How does learner-centered education affect teacher self-efficacy? The case of project-based learning in Korea." *Teaching and Teacher Education* 85: 45-57.
- Collet, J., et al. (2022). *Inclusive Education and Families: Paradoxes, Contradictions, and Barriers*. *Global Inclusive Education: Lessons from Spain*, Springer: 113-126.
- Corbett, J. (2002). *Supporting inclusive education*, Routledge.
- Demchenko, I., et al. (2021). "Training future physical education teachers for professional activities under the conditions of inclusive education." *BRAIN. Broad Research in Artificial Intelligence and Neuroscience* 12(3): 191-213.
- Derzhavina, V. V., et al. (2021). "Inclusive education importance and problems for students social integration." *Propósitos y Representaciones* 9(2): 12.
- Fermín-González, M. (2019). "Research on virtual education, inclusion, and diversity: A systematic review of scientific publications (2007–2017)." *International Review of Research in Open and Distributed Learning* 20(5): 146-167.

Florian, L. and J. Spratt (2013). "Enacting inclusion: A framework for interrogating inclusive practice." *European Journal of Special Needs Education* 28(2): 119-135.

Graham, L. J. (2020). *Inclusive education in the 21st century. Inclusive education for the 21st century*, Routledge: 3-26.

Hellmich, F., et al. (2019). "The role of primary school teachers' attitudes and self-efficacy beliefs for everyday practices in inclusive classrooms—a study on the verification of the 'Theory of Planned Behaviour'." *Journal of Research in Special Educational Needs* 19: 36-48.

Hunt, P. F. (2021). "Inclusive education: The case for early identification and early intervention in assistive technology." *Assistive Technology* 33(sup1): S94-S101.

Klimecká, E. (2023). "Inclusive Education of Gifted Students at Secondary Schools in the Czech Republic Compared to Students With Special Educational Needs." *Roeper Review*: 1-13.

Liasidou, A. (2012). "Inclusive education and critical pedagogy at the intersections of disability, race, gender and class." *Journal for Critical Education Policy Studies (JCEPS)* 10(1).

Lindner, K.-T. and S. Schwab (2020). "Differentiation and individualisation in inclusive education: a systematic review and narrative synthesis." *International journal of inclusive education*: 1-21.

Love, H. R. and E. Horn (2021). "Definition, context, quality: Current issues in research examining high-quality inclusive education." *Topics in Early Childhood Special Education* 40(4): 204-216.

Martins, M. P., et al. (2014). "Supporting inclusive education." *Handbook of Autism and Pervasive Developmental Disorders, Fourth Edition*.

Messiou, K. (2017). "Research in the field of inclusive education: time for a rethink?" *International journal of inclusive education* 21(2): 146-159.

Moriña, A. (2017). "Inclusive education in higher education: challenges and opportunities." *European Journal of Special Needs Education* 32(1): 3-17.

Nilholm, C. (2021). "Research about inclusive education in 2020—How can we improve our theories in order to change practice?" *European Journal of Special Needs Education* 36(3): 358-370.

Pasha, S. (2012). "Readiness of Urban Primary Schools for Inclusive Education in Pakistan." *Journal of Research & Reflections in Education (JRRE)* 6(2).

Ravenscroft, J., et al. (2019). "Factors that influence elementary school teachers' attitudes towards inclusion of visually impaired children in Turkey." *Disability & Society* 34(4): 629-656.

Rose, P., et al. (2018). Identifying disability in household surveys: Evidence on education access and learning for children with disabilities in Pakistan, REAL Centre, Faculty of Education, University of Cambridge.

Seneviratne, K., et al. (2019). "Multi-faceted professional development designs for science teachers' self-efficacy for inquiry-based teaching: a critical review." *Universal Journal of Educational Research* 7(7): 1595-1611.

Sharma, U., et al. (2019). "Addressing barriers to implementing inclusive education in the Pacific." *International journal of inclusive education* 23(1): 65-78.

Singal, N. (2015). "Education of children with disabilities in India and Pakistan: An analysis of developments since 2000." Retrieved on January 13: 2017.

Singal, N., et al. (2020). "School enrolment and learning outcomes for children with disabilities: findings from a household survey in Pakistan." *International journal of inclusive education* 24(13): 1410-1430.

Stepaniuk, I. (2019). "Inclusive education in Eastern European countries: a current state and future directions." *International journal of inclusive education* 23(3): 328-352.

Stubbs, S. (2008). "Inclusive education." Where there are few resources. Oslo, The Atlas Alliance Publ.

Tuncay, A. A. and A. Kizilaslan (2022). "Pre-service teachers' sentiments, attitudes and concerns about inclusive education in Turkey." *European Journal of Special Needs Education* 37(2): 309-322.

Valeo, A. (2008). "Inclusive education support systems: Teacher and administrator views." *International Journal of Special Education* 23(2): 8-16.

Wilczenski, F. L. (1992). "Measuring attitudes toward inclusive education." *Psychology in the Schools* 29(4): 306-312.

Xue, R., et al. (2023). "Analysis of the Factors Influencing Inclusive Education Competency of Primary and Secondary Physical Education Teachers in China." *Sustainability* 15(1): 308.

Yakubova, G., et al. (2022). "Practitioners' attitudes and perceptions toward the use of augmented and virtual reality technologies in the education of students with disabilities." *Journal of Special Education Technology* 37(2): 286-296.

Zollers, N. J., et al. (1999). "The relationship between school culture and inclusion: How an inclusive culture supports inclusive education." *International Journal of Qualitative Studies in Education* 12(2): 157-174.

ANNEXURE A- QUESTIONNAIRE

Assessment of Teachers' Attitudes Regarding Inclusive Education in Private and Public Schools of Rawalpindi and Islamabad.

SECTION (A) DEMOGRAPHICS

1. Your Age
 - a) 23 to 27 years
 - b) 28 to 32 years
 - c) 33 to 37 years
 - d) 38 and above
2. Your Gender
 - a) Male
 - b) Female
3. Your Qualification
 - a) Graduation
 - b) Masters
 - c) PG Dip
4. Educational Institute where you are teaching?
 - a) Public
 - b) Private
5. Years of teaching experience
 - a) 0 to 3 years
 - b) 4 to 6 years
 - c) 7 to 9 years
 - d) 10 years and above
6. City
 - a) Rawalpindi
 - b) Islamabad
7. The grade/level you are teaching at?
 - a) Montessori
 - b) Primary
 - c) Secondary
 - d) Higher secondary
8. Contact with a disabled child?(physical, mental disability, behavioral issues like aggression or ADHD)
 - a) Yes
 - b) No
9. Did you get Training to teach students with diverse needs?
 - a) Yes
 - b) No
10. Knowledge of inclusion policy or legislation?
 - a) Yes
 - b) No
11. Confidence level to teach students with disabilities?
 - a) Low
 - b) Average

c) High

12. Level of experience to teach students with diverse needs?

a) Nil

b) Some

c) High

SECTION B

COGNITIVE ATTITUDE

Sr no	Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	I believe that an inclusive school is one that permits academic progression of all students regardless of their ability.					
2	I believe that students with a disability should be taught in special education schools.					
3	I believe that inclusion facilitates socially appropriate behavior amongst all students					
4	I believe that any student can learn in the regular curriculum of the school if the curriculum is adapted to meet their individual needs.					
5	I believe that students with a disability should be segregated because it is too expensive to modify the physical environment of school.					
6	I believe that students with a disability should be in special education schools so that they do not experience rejection in the regular school.					

AFFECTIVE ATTITUDE

Sr no	Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	I get frustrated when I have difficulty communicating with students with a disability.					
2	I get upset when students with a disability cannot keep up with the day-to-day curriculum in my classroom					
3	I get irritated when I'm unable to understand students with a disability.					
4	I am uncomfortable including students with a disability in a regular classroom with other students without a disability.					

5	I am disconcerted that students with a disability are included in a regular classroom with others without disability.					
6	I get frustrated when I have to adapt the curriculum to meet the individual needs of all students.					

BEHAVIOURAL ATTITUDE

Sr no	Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	I am willing to encourage students with a disability to participate in all social activities in the regular classroom.					
2	I am willing to adapt the curriculum to meet the individual needs of all students regardless of their ability.					
3	I am willing to physically include students with a severe disability in the classroom with the necessary support.					
4	I am willing to modify the physical environment to include students with a disability in regular classroom.					
5	I am willing to adapt my communication techniques to ensure that all students with an emotional and behavioral disorder can be successfully included in the regular classroom.					
6	I am willing to adapt the assessment of individual students in order for inclusive education to take place.					

ANNEXURE-B CONCENT FORM

Title of Research:

Assessment of teacher's attitude towards inclusive education among public and private schools of Rawalpindi/Islamabad.

Researcher Name: Mariam khalid

Purpose of Research:

Mandatory submission in partial fulfillment of the requirement for the Master's degree in Public Health from Quaid e Azam University, Islamabad.

Certificate of Consent:

I have read and understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.

Respondent 'signature:

Identification no:

Dated

Statement of Confidentiality

The information provided by you shall be anonymous. Researcher is obliged to preserve your confidentiality in the following way:

- Code numbers will be assigned which would be used on all documents included in study.
- Questionnaires returned shall be kept safe with access only to the principal researcher.
- Virtual data files shall be kept separately in an external hard drive, password protected
- And shall be used for the purpose of study only.
- Any information before withdrawal shall be deemed good for including in the study.
- Following may use the health information provided by you in connection with this study

The principal researcher

Research Supervisor

Institutional Review Board Al-Shifa School of Public Health

ANNEXURE-C IRB LETTER



**AL-SHIFA SCHOOL OF PUBLIC HEALTH
PAKISTAN INSTITUTE OF OPHTHALMOLOGY
AL-SHIFA TRUST, RAWALPINDI**

MSPH IRB/14-33
27th Sep, 2022

TO WHOM IT MAY CONCERN

This is to certify that **Marivam Khalid** D/O **Khalid Sultan** is a student of Master of Science in Public Health (MSPH) final semester at Al-Shifa School of Public Health, PIO, Al-Shifa Trust Rawalpindi. He/she has to conduct a research project as part of curriculum & compulsory requirement for the award of degree by the Quaid-i-Azam University, Islamabad. His/her research topic which has already been approved by the Institutional Review Board (IRB) is **“Assessment of teachers attitude regarding inclusive education in private and public schools of Rawalpindi and Islamabad”**.

Please provide his/her necessary help and support in completion of the research project. Thank you.

Sincerely,

Dr. Ayesha Babar Kawish
Head

Al-Shifa School of Public Health, PIO
Al-Shifa Trust, Rawalpindi



**AL-SHIFA SCHOOL OF PUBLIC HEALTH
PAKISTAN INSTITUTE OF OPHTHALMOLOGY
AL-SHIFA TRUST, RAWALPINDI**

MSPH-IRB/14-33
27th Sep, 2022

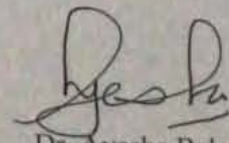
TO WHOM IT MAY CONCERN

This is to certify that **Marivam Khalid D/O Khalid Sultan** is a student of Master of Science in Public Health (MSPH) final semester at Al-Shifa School of Public Health, PIO, Al-Shifa Trust Rawalpindi. He/she has to conduct a research project as part of curriculum & compulsory requirement for the award of degree by the Quaid-i-Azam University, Islamabad. His/her research topic which has already been approved by the Institutional Review Board (IRB) is **“Assessment of teachers attitude regarding inclusive education in private and public schools of Rawalpindi and Islamabad”**.

Please provide his/her necessary help and support in completion of the research project. Thank you.

Sincerely,


Principal
Saddiq Public School
Near, Sadiqia Town, Rawalpindi


Dr. Ayesha Babar Kawish
Head
Al-Shifa School of Public Health, PIO
Al-Shifa Trust, Rawalpindi



**AL-SHIFA SCHOOL OF PUBLIC HEALTH
PAKISTAN INSTITUTE OF OPHTHALMOLOGY
AL-SHIFA TRUST, RAWALPINDI**


ASPH-IRB/14-13
27th Sep, 2022

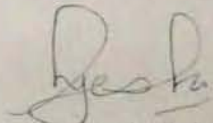
TO WHOM IT MAY CONCERN

This is to certify that **Marivam Khalid** D/O **Khalid Sultan** is a student of Master of Science in Public Health (MSPH) final semester at Al-Shifa School of Public Health, PIO, Al-Shifa Trust Rawalpindi. He/she has to conduct a research project as part of curriculum & compulsory requirement for the award of degree by the Quaid-i-Azam University, Islamabad. His/her research topic which has already been approved by the Institutional Review Board (IRB) is **“Assessment of teachers attitude regarding inclusive education in private and public schools of Rawalpindi and Islamabad”**.

Please provide his/her necessary help and support in completion of the research project. Thank you.

Sincerely,


Head Mistress
Girls High School
Talab Pukhta Banni
Rawalpindi
10-02-23


Dr. Ayesha Babar Kawish
Head
Al-Shifa School of Public Health, PIO
Al-Shifa Trust, Rawalpindi



**AL-SHIFA SCHOOL OF PUBLIC HEALTH
PAKISTAN INSTITUTE OF OPHTHALMOLOGY
AL-SHIFA TRUST, RAWALPINDI**

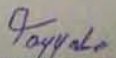
MSPH-IRB/14-33
27th Sep, 2022

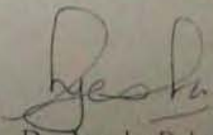
TO WHOM IT MAY CONCERN

This is to certify that **Mariyam Khalid** D/O **Khalid Sultan** is a student of Master of Science in Public Health (MSPH) final semester at Al-Shifa School of Public Health, PIO, Al-Shifa Trust Rawalpindi. He/she has to conduct a research project as part of curriculum & compulsory requirement for the award of degree by the Quaid-i-Azam University, Islamabad. His/her research topic which has already been approved by the Institutional Review Board (IRB) is **“Assessment of teachers attitude regarding inclusive education in private and public schools of Rawalpindi and Islamabad”**.

Please provide his/her necessary help and support in completion of the research project. Thank you.

Sincerely,


DDO/Principal
Mrs. Tayyaba Arshad
FG. Junior Public School
(2nd Shift), Kashmir Road, Rwp.


Dr. Ayesha Babar Kawish
Head
Al-Shifa School of Public Health, PIO
Al-Shifa Trust, Rawalpindi

ANNEXURE-D BUDGET

BUDGET ITEM	TRANSPORT	STATIONARY & INTERNET	PRINTING	PUBLISHING
Pilot testing	2000/-	5500/-	4000/-	-
Data collection	10000/-	7500/-	-	-
Thesis write up	3000/-	8500/-	6000/-	20000/-
Total expenditure	15000/-	22500/-	10000/-	20000/-
Grand total	67500/-			

ANNEXURE-E GANTT CHART

Activities	September 2022	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023
Literature search							
Synopsis writing & IRB approval							
Pilot testing							
Data collection & entry							
Data analysis							
Write up							
Thesis submission							