# ANALYSIS OF AGE SPECIFIC DATA OF STUDENTS UPTO HIGHER SECONDARY SCHOOL LEVEL IN PAKISTAN

Dr. Dawood Shah Ms. Shakila Khatoon Dr. Khawaja Sabir Hussain Ms. Shaista Bano Ms. Samana Ali Bukhari

Academy of Educational Planning and Management

Ministry of Federal Education and Professional Training

Islamabad

2019

# Final

# ANALYSIS OF AGE SPECIFIC DATA OF STUDENTS UPTO HIGHER SECONDARY SCHOOL LEVEL IN PAKISTAN

Dr. Dawood Shah Ms. Shakila Khatoon Dr. Khawaja Sabir Hussain Ms. Shaista Bano Ms. Samana Ali Bukhari

Academy of Educational Planning and Management Ministry of Federal Education and Professional Training Islamabad

2019

#### © AEPAM, Islamabad, 2019

#### 1. Research Team

Dr. Dawood Shah

Ms. Shakila Khatoon

Dr. Khawaja Sabir Hussain

Ms.Shaista Bano

Mr. Muhammad Bilal Kakli

Ms. Samana Ali Bukhari

#### 2. Data collection Team

Ms. Shakila Khatoon

Dr. Khawaja Sabir Hussain

Dr. Agha Ghulam Haider

Mr. Muhammad Bilal Kakli

Ms. Samana Ali Bukhari

Mr. Zubair Farooq

Mr. Muhammad Akram

Mr. Zulfiqar Ali Joya

Mr. Abdul Qudoos Ayub

Mr. Imran Javed

Mr. Shafi Muhammad

# 3. Data Analysis

Ms. Shakila Khatoon

Dr. Khawaja Sabir Hussain

Mr. Muhammad Bilal Kakli

Ms. Samana Ali Bukhari

# 3. Report Writing Team

Ms. Shakila Khatoon

Dr. Khawaja Sabir Hussain

Ms. Shaista Bano

Ms. Samana Ali Bukhari

# 4. Composing and Graphic Presentation

Mr. Zulfiqar Ali Joya, APS

#### **Cataloging in Publication Data**

# Main entry under authors:

Dr. Dawood Shah, Ms Shakila Khatoon, Dr. Khawaja Sabir Hussain, Ms. Shaista Bano and Ms. Samana Ali Bukhari

Research Study on Analysis of Age Specific Data of Students upto Higher Secondary School Level in Pakistan: – Academy of Educational Planning and Management, Islamabad. (AEPAM Publication No.286)

1. Age Specific Data

3. Higher Secondary School

2. Enrollment

4. AEPAM - Pakistan

ISBN: 978-969-444-113-9

# **PREFACE**

ducation is a fundamental human right of every child in Pakistan and it is constitutional obligation of the government of Pakistan to provide educational I facility to the masses in the country considering it critical for the development of individuals and society. The role of education in human capital formation is indispensable and it is key indicator for human resource development for a knowledge based economy in present scenario. Measuring access to education depends on the level of education for which access is to be calculated, thus access to the first level of education is measured in the terms of the proportion of students admitted relative to the total population eligible for enrolment at that level and this is described as the in-take rate. Education indicators depend on the level of education for the calculation of measuring access to the education, coverage of the school age population consequently enrolment can be measured as official age group of particular level, overage enrollment and underage enrollment so as to assess the efficiency of education system in the country. Realizing the importance of sustainable development goals and way forward to accomplish these international commitments, it is pre-requisite to have empirical evidences regarding gross enrolment ratio as well as net enrolment ratio in the country, the findings of this study are very important for insight development of the policy makers to develop pragmatic strategies to achieve targets of sustainable development goals in the country.

I would like to express my gratitude to all the education managers, head teachers and teachers serving in public and private sector in Education Departments of all provinces/regions for their cooperation with the AEPAM research team in data collection and providing the required information. I also commend the efforts of AEPAM research team comprising of Ms. Shakila Khatoon, Dr. Khawaja Sabir Hussain, Ms. Shaista Bano, Mr. Muhammad Bilal Kakli, Ms. Samana Ali Bukhari for preparation of this report. I also appreciate other officials of AEPAM who assisted the research team in data collection. The services of Mr. Zulfiqar Ali Joya, APS for typing and composing of this report are highly appreciated.

Dr. Dawood Shah Director General

# **TABLE OF CONTENTS**

<u>Ch#</u>		<u>Title</u>	<u>Page</u>
	Preface	_	v
	Executiv	e Summary	xi
1	Introdu	ction	1
	1.1	Rationale of the Study	3
	1.2	Objectives of the Study	3
	1.3	<b>3</b>	4
	1.4	Significance of the Study	4
2	Literatu	re Review	5
	2.1	Background	5
	2.2	Overview of age specific enrollment around the world	6
	2.3	Sustainable Development Goals and its Indicators	8
	2.4	Significance of Age Groups in Calculating Education	11
		Indicators	
	2.5	Limitations in Calculating NER in Pakistan	12
	2.6	National Education Management Information System	13
		(NEMIS)	
3	Methodo	ology	15
	3.1	Population of the Study	15
	3.2	Sample of the Study	15
	3.3	Research Instrument of the Study	16
	3.4	Pilot Testing of Research Instrument	16
	3.5	Data Collection and Analysis	17
	3.6	Findings, Conclusions and Recommendations	17
4	Data An	alysis and Interpretation	19
	4.1	Distribution of Age Groups at Primary Level in Pakistan	19
	4.2	<del>-</del>	23
	4.3		27
	4.4	•	31
	4.5	Age Specific Trends	35
	46	Level-wise Comparison of Different Age Groups	44

5	Findings	s, Conclusions and Recommendations	49
	5.1	Findings	49
	5.2	Conclusions	50
	5.3	Recommendations	51
	Bibliogr	aphy	53
	Annexu	res	57

# LIST OF ABBREVIATION

AEPAM	Academy of Educational Planning and Management
AJK	Azad Jammu and Kashmir
ANER	Adjusted Net Enrollment Ratio
ASER	Age Specific Enrolment Ratio
ECE	Early Childhood Education
FATA	Federally Administered Tribal Area
GB	Gilgit Baltistan
GER	Gross Enrollment Ratio
ICT	Islamabad Capital Territory
KP	Khyber Pakhtunkhwa
NEMIS	National Education Management Information System
NER	Net Enrolment Ratio
SDGs	Sustainable Development Goals
SLE	School Life Expectancy



# **EXECUTIVE SUMMARY**

This study was designed to collect age specific data from primary up to higher secondary schools in order to find out overage, underage and official age group enrolled students in these levels. Measuring access to education depends on the level of education for which access is to be calculated, thus access to the first level of education is measured in the terms of the proportion of students admitted relative to the total population eligible for enrolment at that level and this is described as the in-take rate. Education indicators depend on the level of education for the calculation of access to the education and coverage of the school age population. Enrolment can be measured as official age group of particular level, overage enrollment and underage enrollment. Random sampling technique was used to select a representative sample for the generalization of results. Twelve districts from all provinces/regions were selected. Total 16 schools (public 12 and 4 private) were selected from Primary to Higher Secondary with equal ratio of rural/unban and male/female schools from each sample district. The age specific data was collected from total 13271 students (Primary 5755, Middle 3570, Secondary 2887 and Higher Secondary 1059) from 12 sample districts. The findings of the study were as under:-

- 1. The study discovered that about 71% enrolled students of both public and private sectors fall within official age group i.e. (5-9 years) at primary level in Pakistan. The study found that the highest percentage of students i.e. 78% in primary school of both public and private sector lie within official age (5-9 years) in FATA, 73% in ICT, 72% in Khyber Pakhtunkhwa and Gilgit Baltistan. The lowest percentage of enrolled students at primary level of both public and private sectors who fall within official age group (5-9 years) were 66% in AJK. The study found that 27% enrolled students in both public and private primary schools were overage. Among provinces and regions AJK has the highest number of overage students i.e. 33% of both public and private sector at primary level followed by Sindh and Punjab where overage students at primary level were 32%. The study identified 2% underage students enrolled in both public and private primary schools in the country. The highest percentages i.e. 6% of underage students were found at primary level in Gilgit Baltistan and 5% in Balochistan.
- 2. The study revealed that about 53% enrolled students of both public and private sector fall within official age group i.e. (10-12 years) at middle level in the country. Among provinces/regions, the study identified the highest percentage of students i.e. 62% & 60% in middle school of both public and private sector lie within official age (10-12 years) in FATA and GB respectively. The lowest percentage i.e. 47% of enrolled students of both public and private sectors, which fall within official age group (10-12 years) were in AJK. The study discovered that 44% enrolled students in both public and private middle schools were overage. Among provinces and regions, AJK

has the highest number of overage students. i.e. 50% of both public and private sector at middle level followed by ICT where overage students at middle level were 48%. The study identified 3% underage students enrolled in both public and private middle schools in the country. The highest percentage i.e. 12% of underage students were found at middle level in Gilgit Baltistan.

- 3. The study found that about half of enrolled students of both public and private sector fall within official age group i.e. 13-14 years at secondary level in Pakistan. The study identified two thirds enrolled students of both public and private sector at secondary level in FATA fall within the official age group whereas, the lowest percentages of enrolled students at secondary level of both public and private sectors who fall within official age group (13-14 years) i.e. 44% were in Punjab followed by ICT i.e. 45%. The study revealed that 44% enrolled students in both public and private secondary schools were overage in the country. Among provinces and regions, Balochistan has the highest number of overage students i.e. 52% of both public and private sectors at secondary level followed by ICT where overage students at secondary level were 50%. The study found 8% underage students enrolled in both public and private secondary schools in the country. The highest percentage i.e. 30% of underage students was observed at secondary school level in Gilgit Baltistan.
- 4. The study identified that about 46% enrolled students of both public and private sectors fall within official age group i.e. 15-16 years at higher secondary level in Pakistan. The highest percentage of students i.e. 73% in higher secondary school of both public and private sector lie within official age (15-16 years) in FATA, 63% in GB, 51% in Khyber Pakhtunkhwa, 50% in Balochistan. The lowest percentage of enrolled students at higher secondary level of both public and private sectors who fall within official age group (15-16 years) were 34% in Punjab. The study found that 49% enrolled students in both public and private higher secondary schools were overage. Among provinces and regions, AJK and Punjab has the highest number of overage students i.e. 60% of both public and private sector at higher secondary level followed by ICT, where overage students at higher secondary level were 55%. The study discovered 5% underage students enrolled in both public and private higher secondary schools in the country. The highest percentage i.e. 13% of underage students was identified at higher secondary level in Gilgit Baltistan.

#### **Conclusions**

- 1. The enrolled students at different levels of education were categorized as (i) students who fall within official age group of specific level of education (ii) overage students of specific level of education and (iii) underage students of specific level of education.
- 2. The findings of the study indicate that 71% enrolled students of both public and private sector at primary level fall within official age group, 53% students at middle level lie within official age group, 48% students at secondary level fall within official

age group and 46% students at higher secondary level fall within official age group. It is concluded that about 59% percentage of students from primary to higher secondary fall within official age group 5-16. It was revealed that more students of private sector fall within official age group at all levels of education (primary to higher secondary) as compared to public sector.

- 3. It is concluded that FATA has the highest percentage i.e. 77% students of public primary schools who fall within official age group, whereas AJK has the lowest percentage of public primary school students who lie within official age group. Similarly, FATA has the highest percentage i.e. 62% of students at public secondary schools within official age group, whereas Punjab has the lowest percentage of public secondary school students within official age group. At the higher secondary level FATA has the highest percentage i.e. 73% of enrolled students in public schools within official age group, whereas, ICT has the lowest percentage of public higher secondary school students i.e. 29% within official age group.
- 4. It was also concluded that one third of enrolled students at primary level and around half of the students at middle, secondary and higher secondary level in both public and Private sectors were found overage.

#### Recommendations

- 1. UNESCO's Global Education maintains a database with entrance age and duration of primary education for 206 countries and territories. In 127 out of 206 countries, the official primary school entrance age is six years and 123 out of 206 countries have primary school duration of six grades. In Pakistan about one-third enrolled students at primary level of both public and private sectors are overage. It is therefore, recommended that official entrance age for primary education should be six years and official age group should 6 to 10 years instead of 5 to 9 years. Education policy 2009 proposed policy actions for ECE and it was recommended that ECE age group should be from 3 to 5 years. The findings of the present study support this policy action.
- 2. The findings of study indicate that percentage of overage students increases as the level of education increases, the percentage of overage students at primary level increased 27% to 49% at higher secondary level. There is a need to revise official age groups from primary to higher secondary. It is recommended that age group for primary should be 6-10 years, for middle level 11-13 years, similarly for secondary 14-15 years and 16-17 years for higher secondary level.
- 3. In E-9 countries school entrance age for secondary school ranges from 10 to 13 years. In 4 of 9 countries students enter secondary school at 11 years of age i.e. in Bangladesh, Brazil, Egypt and India). Whereas, secondary school education begins at 12 years in three countries i.e. China, Mexico and Nigeria. Again, Pakistan is an exception among E-9 countries where secondary education begins at 10 years. If the

official age group of primary can be revised then there will be an automatic effect on entrance age of secondary school.

- 4. It is also recommended that all provincial/regional EMISs should collect accurate age specific data of enrolled students at all levels of education and maintain this information in their databases. This data is used for computation of NER which is a key indicator of access to education.
- 5. Large number of overage and under age students is a challenge for teachers who are supposed to teach a more age diverse group with differing levels of maturity and school preparedness. This issue needs to be focused by researchers, to study the pace of learning of students of different age group in a same grade.

# INTRODUCTION

ducation is a fundamental human right and every child is entitled to it. It is critical for development of individuals and society. It covers the way to a successful and productive future. In the path to economic recovery, education has become a central element of the countries' growth strategies. To be effective in the long run, improvements in education need to enable all students to have access to quality education without disparity, to stay in the system until at least the end of upper secondary education, and to acquire the skills and knowledge they will need for effective social and labour market integration. Many students leave formal schooling at this time. The main objective of every education system in any country is to attract and to retain maximum students in the schools for development of the country. Therefore, the National Education Policy (2009) focuses on two large and critical problems being faced by the education sector (i) low participation and narrow base of the sector; and (ii) poor quality of the provision of educational facilities.

The Constitution of Islamic Republic of Pakistan, 1973 lays down that "State shall be responsible for eradication of illiteracy and provision of free and compulsory education up to secondary level, within minimum possible time" (Article 37-B, 1973 Constitution of Pakistan). Further, recent amendments to the Constitution, specifically article 25A has codified the right to education as a basic human right. The article 25-A says that "The State shall provide free and compulsory education to all students of the age of five to sixteen years in such manner as may be determined by law."

The above-mentioned articles of the constitution of Pakistan emphasizes on the provision of compulsory education to all the students from age 5 to 16, whereas, there are certain challenges such as financial constraints and lack of infrastructure to implement these articles in letter and spirit at national and provincial levels. Among the various trending issues school entrance age is the one of most critical hindrance. In Pakistan, the students of the age five to sixteen remain in the Primary to Higher Secondary level of education. The official primary school entrance age is 5. The educational institutions from Primary to Higher Secondary can be divided into the following categories:-

- 1. Primary Schools (Grade I-V) 5 to 9 Years
- 2. Middle Schools (Grade VI-VIII) 10 to 12 Years
- 3. Secondary Schools (Grade IX-X) 13 to 14 Years
- 4. Higher Secondary Schools (Grade XI-XII) 15 to 16 Years

To maintain the retention of students as per official age brackets is a crucial problem. Many parents rely on classroom teachers and education policymakers to recommend what is best for their students when they enter the realm of formalized schooling. Despite this, there is still debate among these professionals over what effect school entrance age has on a students' academic achievement. Educators and policy makers should have a broad scope of literature and research studies available to them when they make academic recommendations to parents (Voyles, 2011).

The UNESCO global education database (2006) maintains a database with the entrance age and duration of primary and secondary education for 206 countries and territories. In 204 of 206 countries, students enter primary school between 5 and 7 years of age. In 127 countries, the official primary school entrance age is 6 years. The duration of primary school ranges from 3 years to 8 years. In 123 countries, primary school education consists of 6 distinctive grades. In E-9 countries school entrance age for secondary school ranges from 10 years in Pakistan to 13 years in Indonesia. In 4 of 9 (E9) countries students enter secondary school at 11 years of age i.e. in Bangladesh, Brazil, Egypt and India). Whereas, secondary school education begins at 12 years in three countries i.e. China, Mexico and Nigeria. Again, Pakistan is an exception among E-9 countries where secondary education begins at 10 years. In rest of the countries it ranges from 11 to 13 years. The decision of age for entering schooling is very important for the future of academic success and failure.

The Millennium Development Goals (MDGs) were the eight international development goals for the year 2015 that had been established following the Millennium Summit of the United Nations in 2000, these goals kept education as goal two i.e. Universal Primary Education (UPE) (United Nations, 2010). These goals were set to be achieved till 2015. These goals were then replaced by Sustainable development goals (SDG) and they were set by the United Nations General Assembly in 2015 which includes quality education as SDG 4. Currently, prominent among the social concerns of a significant number of countries including Pakistan is the achievement of the SDG 4. This goal states "Quality education: ensure inclusive and equitable quality education and promote life-long learning opportunities for all".

According to Thuang (2008) of United Nations Educational, Scientific and Cultural Organization Institute for Statistics, access to education is defined by analysis of different input indicators and along with many other indicators Net Enrolment Ratio (NER) by Level is one of representative of countries access to basic education. Net enrollment rate is one of the important indicators of measuring populations' access to education. So the measurement of NER is very important while considering the educational attainment of any country. The countries that were pursuing the attainment of MDGs were very much interested in calculating NER.

NER along with many other educational indicators allow United Nations to compare the educational attainment of different countries. One of the many factors affecting the value of NER is the presence of overage and underage enrollment in the

classrooms. It was therefore required to identify the age groups of students in different levels, from primary to higher secondary level. There was no reliable study available to confirm the percentages of official age, overage and underage students in Pakistan. The present study is designed to fulfill this gap in the available literature.

# 1.1 Rationale of Study

The position explained, required a full-fledged study to collect data and calculate the percentage of age-specific enrolled school students from primary to higher secondary level in public and private schools in Pakistan.

NER is one of the key educational indicators that are calculated to find out the state of education in a country. Age wise data of enrolled students is not calculated in Pakistan which makes it difficult for the government to calculate the NER. There is no research available to define the different age groups among students who are present in a particular grade and officially defined age groups. So the present study was designed keeping in view the needs of calculating different age groups at different levels i.e. primary to higher secondary education. It is very important to know that how many students are present at a particular level according to their specified age furthermore what is the percentage of underage and overage students.

The National Education Management Information System (NEMIS) gives a complete picture of net enrolment of school students from primary to higher secondary levels for all provinces and federating units in both the public sector (formal and nonformal) and the private sector. However, age-wise data of enrolled students is not yet collected and calculated. Therefore, the present study may be added to the body of literature in the field of education where there is the issue of different age groups as compared to the official age groups for different levels of education in Pakistan.

One of the purposes of the present study is also to provide a broad perspective to stakeholders, educational managers and teachers regarding the age-specific data of enrolled school students from primary to higher secondary level in public and private schools at the national level. It may also help policy-makers to know what type of plan of action would be practicable for diversified age groups of different education stages to achieve desired results.

#### 1.2 Objectives of the Study

The objectives of the study were to:

- 1. Collect age-specific data of enrolled students from primary to higher secondary level in public and private schools
- 2. Calculate the percentage of over-age, underage official age of enrolled students from primary to higher secondary level in public and private schools.

3. Provide level-wise percentage of age specific students to the National Education Management Information System (NEMIS) on the basis of findings of the study so that educational indicators can be calculated.

# 1.3 Delimitations of the Study

Keeping in view the limited time and resource constraints, the study was delimited to the twelve districts across the country. From Punjab (Lahore and Bahawalpur), Sindh (Karachi and Sukkur), Balochistan (Quetta and Pishin), Khyber Pakhtunkhwa (Peshawar and Mansehra), FATA (Khyber Agency), Azad Jammu and Kashmir (Mirpur), Gilgit-Baltistan (Gilgit) and ICT (Islamabad) were included. Moreover it was not possible to collect ages of all the students present in a classroom, therefore, date of birth of only 20 students from each class was collected.

#### 1.4 Significance of the Study

This study was conducted to collect and calculate age-specific data of enrolled school students from primary to higher secondary level in public and private schools in Pakistan. This study was intended to bring up an important input and help policy-makers/planners to redirect their efforts to design mechanisms to enroll students at specified and official age. There is significant evidence required to change the current definitions of entrance age to overcome the overage and underage participation rate in schools in Pakistan. The research findings and recommendations may provide strategic guidance to the stakeholders at Federal, Provincial and Regional levels to take measures to handle the over-age and under-age participation rate. Furthermore defining age groups will help calculating NER and other related educational indicators.

# LITERATURE REVIEW

#### 2.1 Background

s the second millennium move forward, the international community sight sustainable development as an objective to which all countries should strive for. Within the scope of this multi faceted term, one of the most important factor is the development of human resources. A nation will not be considered as a powerful nation if it does not have good quality human resource. One of crucial factors in human resource development is increasing the access and participation in education at all levels. Keeping in view the importance of education United Nations had set goals for the education sector known as Sustainable Development Goals (SDGs).

Education is a step by step process of gaining knowledge and set of skills. Education is a human right, a vital sector that play decisive role in human resource development, social-economic growth, holistic development, building human capabilities through knowledge based society, creativity, knowledge, and knowledge based learning organization (Malik, 2011). Education is not just preparation for life but a life in itself (Malik, 2006). There are different social benefits of education and the developed nations are the witness of it. Educated people are the backbone of a society and lack of education gives birth to numerous social problems like poor health, internal conflict, poor living standards and many more. Only educated people can realize the value of the organization, infrastructure, and healthcare. Only educated people will be able to form a clean and healthy society (Taiwo, 2018).

According to World Education Report (2000), education is a right and shall be free and accessible for everyone who develops human personality, understanding, and tolerance among all nations, racial or religious groups. Every person shall be able to benefit from educational opportunities designed to meet their basic learning needs, these needs comprise both essential learning tools and the basic learning content. It is an obligation of the State to provide equal opportunity and make possible measures to access it to all citizens for improving their status in life.

The Constitution of the State is a document for development and implementation of policies and source of legislation. This is a document which reflects the collective will of nation, major principles for national development, give direction to achieve national objectives (Isani, 2001). Right to compulsory and free secondary education is the constitutional right. Article 37-B of the Constitution of Pakistan 1973 mentioned free and compulsory education up to secondary level is the responsibility of

the state (The constitution of Pakistan, 1973). The article 25-A says that "The State shall provide free and compulsory education to all students of the age of five to sixteen years in such manner as may be determined by law." Now it is responsibilities of federal, provincial and regional governments to implement this article of the Constitution.

# 2.2 Overview of Age specific Enrollment around the world

UNESO Global education data base collect the educational data of different countries all over the world. The table below presents the information regarding entrance age of students among different countries. The official entrance age of primary schooling is 6 years in 127 countries out of 206 countries. The duration of primary schooling is 6 years in 123 countries out of 206 countries.

Table 2.2.1 Entrance Age and Duration of Primary Education

Primary School	Prima	ry scho	ol Entran	ce age (	years)	Total
<b>Duration</b> (years)	4	5	6	7	8	Total
3	0	0	0	3	0	3
4	0	0	12	16	1	29
5	0	4	17	3	0	24
6	0	15	86	22	0	123
7	0	11	12	3	0	26
8	1	0	0	0	0	1
Total	1	30	127	47	1	206

Source: UNESCO Global Education Database, 2006

The official entrance age for secondary school ranges from 10 to 14 years (Table 2.2.2). In 102 of 206 countries and territories, students enter secondary school at 12 years of age. The duration of secondary school ranges from 4 years to 9 years.

Table 2.2.2 Entrance Age and Duration of Secondary Education

Secondary School	Second	lary sch	ool entra	nce age	(years)	Total
duration (years)	10	11	12	13	14	Total
4	0	1	1	0	0	2
5	0	2	25	11	2	40
6	2	8	55	16	1	82
7	9	24	21	7	0	61
8	6	13	0	0	0	19
9	2	0	0	0	0	2
Total	19	48	102	34	3	206

Source: UNESCO Global Education Database, 2006

The E-9 is a forum of nine countries of the world. The "E" stands for Education and "9" represents the nine secondaryly populated countries of the world namely Pakistan, Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico and Nigeria. E-9 countries have over half of the world's population, more than 70% of the world's illiterates and 42% of the world's out of school students.

However presenting country-wise data of all 206 countries may be more exhaustive; hence we discussed only E-9 countries primary and secondary students' age-specific data from UNESCO Global Education Database (2006).

Table 2.2.3
Entrance Age and Duration of Primary Education and Secondary Education in E-9 Countries

S#	E-9 Countries	Primary School Entrance Age (Years)	Primary School Duration (Years)	Secondary School Entrance Age (Years)	Secondary School Duration (Years)	No. of Grades upto Higher Secondary Level	Age at completion of Sec. School Years
1	Pakistan	5	5	10	7	12	17
2	Bangladesh	6	5	11	7	12	18
3	Brazil	7	4	11	7	11	18
4	China	7	5	12	6	11	18
5	Egypt	6	5	11	6	11	17
6	India	6	5	11	7	12	18
7	Indonesia	7	6	13	6	12	19
8	Mexico	6	6	12	6	12	18
9	Nigeria	6	6	12	6	12	18

Source: UNESCO Global Education Database, 2006

Table 2.3 shows the entrance age and duration of primary and secondary education in E-9 countries. Accordingly students enter primary school between 5 and 7 years of age. In Bangladesh, Egypt, India, Mexico and Nigeria the official entrance age is 6 years.

Primary school education begins at 7 years in Brazil, China and Indonesia except Pakistan, where primary school begins at 5 years. The duration of primary school ranges from 4 years in Brazil to 6 years in Indonesia, Mexico and Nigeria. In five countries, primary school duration is 5 years (Pakistan, Bangladesh, China, Egypt and India). It is also evident from the Table 1.3 that the official entrance age for secondary school ranges from 10 in Pakistan to 13 years in Indonesia. In 4 out of 9 countries, students enter secondary school at 11 years of age and these countries are Bangladesh, Brazil, Egypt and India. Secondary school education begins at 12 years in three countries China, Mexico and Nigeria. The duration of secondary school ranges 6 years in China, Egypt, Indonesia, Mexico and Nigeria to 7 years in Pakistan, Bangladesh, Brazil and India.

In Pakistan, the age-specification structure of education system in public sector is depicted in Table 1.4. According to the National Institute of Population Studies (NIPS, 2016) projections, there are currently 51.17 million students in Pakistan between the ages of 5 and 16. Among this group, only 28.53 million students attend an educational institution government or private (Pakistan Education Statistics, 2018).

Table 2.2.4
The Structure of Education Sector in Pakistan (Pre-Primary to Higher Secondary level)

Stages of Education in Pakistan	Age of Students (In Years)	Classes
Elementary Education		
Pre-Primary Schools	3-4	UA*-K*
Elementary or Primary Schools	5-9	1-5
Middle Schools	10-12	6-8
Secondary Education		
Secondary Schools	13-14	9-10
Higher Secondary School	15-16	11-12

\*UA= Un-admitted; \* K= Katchi

Source: Pakistan Education Statistics 2016-17, AEPAM

Studies have shown that late entry into primary school can cause students to be over-age for their grade. Simultaneously early entry in primary school can be a cause of under-age attendance. Resultantly large numbers of over-age and under-age students present a challenge for teachers who must teach a more diverse group with different levels of maturity and school preparedness (EPDC, 2007).

# 2.3 Sustainable Development Goals and its Indicators

Access to basic education is a key component to a nation's development. Sustained access to education is critical to long term improvements in productivity and the reduction of inter-generational cycles of poverty. Access to education when broadly defined is central to any development strategy that seeks to diminish poverty and enhance well being (Amakyi & Mensah 2016). The Millennium Development Goals (MDGs) were the eight international development goals for the year 2015 that had been established following the Millennium Summit of the United Nations in 2000, following the adoption of the United Nations Millennium Declaration and these goals kept education as goal two i.e. Universal Primary Education (UPE) (United Nations, 2010) These goals were set to be achieved by 2015 however, Pakistan could not achieved these goals due to various reasons.

The SDG 4 states "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." Pakistan being one of the signatory members of SDGs is determined to achieve these goals. The achievement of this goal is

constantly being monitored and one of the key factors under close scrutiny is access to basic education which can be measured in many ways. One of these is to derive the Net Enrolment Ratio (NER), which is an aggregate value, for a particular level of education. Hence the correct calculation of NER is very important to measure the achievement of SDG4 in Pakistan. Few of those indicators including NER are defined here:-

#### 2.3.1 Net Enrolment Ratio (NER)

The Net Enrolment Ratio (NER) is defined by the United Nations Educational Scientific and Cultural Organization Institute for Statistics as "enrolment of the official age-group for a given level of education expressed as a percentage of the corresponding population" (UNESCO Institute of Statistics). It can also be defined as Enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population (UNESCO 2009).

In order to calculate NER the number of pupils enrolled at a specific level of education, who are of the official age group for a given level of education is divided by the population of the same age group for the same year and multiply the result by hundred. Data source of getting age brackets are school registers, school surveys annual school or census data on enrolment by age, population censuses or estimates for schoolage population normally obtained from the central statistical office. In calculating NER types of disaggregation are done by gender, geographical location (region, urban/rural) and by level of education.

This ratio is derived by relating the enrolment of the official ages of a level of education to the corresponding population for the same year. For example if the specific age of primary education is 6 years with a duration of 6 years, the enrolment data used includes only the enrolment for primary education for ages 6 to 11 years, irrespective of whether there are under or over aged students participating in this level of education. For example, if a country had the NER in primary education at 34.4% then out of every 100 students within the official age-group for primary education, only 34 were enrolled in school (The World Bank Group 2010).

The purpose of NER is to show at what extent students and youth of official age group corresponds to that particular level of education. This is a very important indicator in measuring "Access to Education", when considering gender inequality issues, as well as regional or rural/urban inequalities. It is used to show the extent of coverage in a given level of education of students and youths belonging to the official age group corresponding to the given level of education (Wikigender, 2018).

A high NER indicates a secondary level of coverage for the official school-age population. The theoretical maximum value is hundred. Increasing trends can be considered as reflecting improving coverage at the specified level of education. When the NER is compared with the Gross Enrollment Ratio (GER), the difference between the two highlights the incidence of under-aged and over-aged enrolment. If the NER is below hundred, then the complement, i.e. the difference with hundred, provides a

measure of the proportion of students not enrolled at the specified level of education. By using product of NER at a specific level of education, the out of school students of specific age group can be worked out. To measure universal primary education, for example, adjusted primary NER is calculated on the basis of the percentage of students in the official primary school age range who are enrolled in either primary or primary section of middle and secondary schools education. A more precise complementary indicator is the Age-Specific Enrolment Ratio (ASER) which shows the participation in education of the population of each particular age, regardless of the level of education (UNESCO, 2009).

# 2.3.2 School-Life Expectancy (SLE)

This indicator can be defined as "the total number of years of schooling which a child of a certain age can expect to receive in the future, assuming that the probability of his or her being enrolled in school at any particular age is equal to the current enrolment ratio for that age". The purpose of calculating this indicator is to show the overall development of an educational system in terms of the average number of years of schooling that the education system offers to the eligible population, including those who never enter school. For the measurement of this indicator for a child of a certain age, it is calculated as the sum of the age specific enrolment rates for the levels of education specified. Keeping in view the key position of age specific enrollment while calculating this indicator it is very important to find out the percentages of age specific enrollment.

A relatively secondary SLE indicates greater probability for students to spend more years in education and higher overall retention within the education system. It must be noted that the expected number of years does not necessarily coincide with the expected number of grades of education completed, because of repetition. Since school life expectancy is an average based on participation in different levels of education, the expected number of years of schooling may be pulled down by the magnitude of students who never go to school. Those students who are in school may benefit from many more years of education than the average.

# 2.3.3 Gross Enrolment Ratio (GER)

The Gross Enrollment Ratio can be defined as "Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year. The purpose of this indicator is to show the general level of participation in a given level of education. It indicates the capacity of the education system to enroll students of a particular age group. It can also be a complementary indicator to net enrolment rate (NER) by indicating the extent of over-aged and under-aged enrolment.

In order to calculate the GER divide the number of pupils (or students) enrolled in a given level of education regardless of age by the population of the age group which officially corresponds to the given level of education, and multiply the result by 100. A secondary GER generally indicates a secondary degree of participation, whether the

pupils belong to the official age group or not. A GER value approaching or exceeding 100% indicates that a country is, in principle, able to accommodate almost of its school-age population, but it does not indicate the proportion already enrolled. The achievement of a GER of 100% is therefore a necessary but not sufficient condition for enrolling all eligible students in school. When the GER exceeds 90% for a particular level of education, the aggregate number of places for pupils is approaching the number required for universal access of the official age group. However, this is a meaningful interpretation only if one can expect the under-aged and over-aged enrolments to decline in the future to free places for pupils from the expected age group.

GER at each level of education should be based on total enrolment in all types of schools and education institutions, including public, private and all other institutions that provide organized educational programs. Limitations: This indicator can exceed 100% due to the inclusion of over-aged and under-aged students because of early or late entrants, and grade repetition. In this case, a rigorous interpretation of GER needs additional information to assess the extent of repetition, late entrants, etc.

## 2.3.4 Age Specific Enrollment Rate (ASER)

The Age Specific Enrollment Rate can be defined as "Enrolment of a specific single age enrolled, irrespective of the level of education, as a percentage of the population of the same age". The purpose of calculating this indicator is to show the extent of the educational participation of a specific age cohort. For calculation of this indicator we have to divide the number of students of a specific age enrolled in educational institutions at all levels of education by the population of the same age and multiply the result by 100. A secondary ASER denotes a secondary degree of educational participation of the population of the particular age. The theoretical maximum value is 100%. Increasing trends can be considered as reflecting improving participation of the particular age. If the ASER is below 100%, then the complement, i.e. the difference with 100% provides a measure of the proportion of the population of the particular age who are not enrolled. ASER at each level of education should be based on total enrolment in all types of schools and education institutions, including public, private and all other institutions that provide organized educational programs. The enrolment and population data should refer to the same date. Further, it must be ensured that the enrolment data covers all levels of education to avoid excluding some members of the age cohort. There are certain limitations of this indicator one of which is that this indicator does not give an indication of the grade or the level of education in which pupils or students are enrolled except when it is calculated by level of education.

#### 2.4 Significance of Age Groups in calculating Educational Indicators

Compulsory school entrance age and admission policies differ across countries and educational systems, and there is a continuing debate on the question whether and how the age at school entry affects various student outcomes. Defining age groups for students in different grades is very important as this will be the part which decides what should be taught to students at different age groups (Sakic, Burusic, and Babarovic,

2013). Age wise data of enrolled students is not available in Pakistan; however, last several years the NER is calculated on assumptions and estimation, usually it is assumed that about 20% students enrolled in school are overage or under-age. There is no research available to define the different age groups among students who are present in a particular grade and officially defined age groups. So the present study was designed keeping in view the needs of defining official age groups for a particular level of education i.e. primary to higher secondary education. It is very important to know that how many students are present in classrooms according to their specified age. Furthermore, it is also essential to know that what is the percentage of underage and overage students.

# 2.5 Limitations in Calculating NER in Pakistan

In Pakistan the GER at primary level is 104% and NER is 77% so there is difference about 27%. This difference indicates that about 27% enrolled students at primary level are either overage or under-age. Giving the number of repeaters in primary grades and the incidence of students beginning their primary school after age 5, it is likely that most of the difference is due to overage students. Numerically, this means that over 5.061 million students in primary school are over 9 years of age. Any reduction in this number, possibly by decreasing the repetition rate, may open up places in the primary system for some of students not currently in school. Another crucial fact is that there is no research available to verify the presence of over aged students in schools. Moreover we need the valid evidences to discover average and under-age students enrolled at various level of education. If the age groups may be revised in Pakistan it will help in covering the difference between GER and NER.

For tertiary education, this indicator i.e. NER is not pertinent because of the difficulties in determining an appropriate age group due to the wide variations in the duration of programs at this level of education. As regards primary and secondary education, difficulties may arise when calculating an NER that approaches 100% if:

- a. The reference date for entry to primary education does not coincide with the birth dates of all of the cohort eligible to enroll at this level of education;
- b. A significant portion of the population starts primary school earlier than the prescribed age and consequently finishes earlier as well;
- c. There is an increase in the entrance age to primary education but the duration remains unchanged (UNESCO, 2009).

Although the NER cannot exceed 100%, values up to 105% have been obtained reflecting inconsistencies in the enrolment and/or population data.

# 2.6 National Education Management Information System (NEMIS)

Pakistan has a National Education Management Information System (NEMIS) which is responsible to consolidate education data annually at national. The system covers public and private sector and comprehensively show picture of educational provisions within the country. NEMIS publishes Pakistan Education Statistics report annually and this report provides all the key education indicators including GER and Adjusted Net Enrollment Ratio (ANER). It is very important to identify the student of which age groups are present at a particular level i.e. primary, middle, secondary and higher secondary level in schools right now. The appropriate age group to derive NER is very important as this affects the results of NER. Defining age group is very important because NERs are presently being used with growing frequency to determine the eligible age group of students' population who are not enrolled. This means that if the NERs are not correct then the number of out of school students may change; the out of school students is a matter of great concern for the government and international agencies e.g. UN in accomplishment of SDG 4.

It is clear that Pakistan is still a long way from achieving universal primary education (UPE). As indicated by the primary NER 77% which means that about 23% of the population 5 to 9 years of age is not in school (Pakistan Education Statistics 2016-2017). Furthermore, under current conditions, the education system does not provide for a substantial percentage of students to move beyond the primary level. At present, the average enrolment per grade at the middle level is less than one-half the average enrolment per grade at the primary level. This is considerably less than that of most other countries, and it is clear that the delivery system needs to significantly be increased the proportion of students capable of studying beyond the primary level (Lynd, 2007).

Pakistan is also facing criticism when it comes to the number of out of school students in the country. While pursuing the achievement of SDGs, it is very important for Pakistan to provide the authentic and reliable data about different indicators of the education. The present study is an effort to make correct assessment of NER that is an important indicator of SDGs, related to access to education.

# **METHODOLOGY**

he study was descriptive and a survey type of research in nature. Detail of research methodology is as under:-

#### 3.1 Population of the Study

The study was designed to define the age groups of student from grade one to twelve. Defining age groups with respect to grades helped calculating NER. The population of the study was all the students enrolled from grade one to twelve studying in private and public schools of Pakistan.

# 3.2 Sample of the Study

Random sampling technique was used to select a representative sample for the generalization of results. Twelve districts from all provinces/regions were selected. It was decided that one boy's school of each Primary, Middle, Secondary and Higher Secondary to collect data from public schools would be selected from the urban side of district and same number from girl's schools. While to collect data from rural area one from each primary and middle school would be selected from both boys and girls. For private sector it was decided that one institution of each level, i.e. Primary, Middle, Secondary and Higher Secondary, irrespective of boys and girls differentiation would be selected from each sample district. Keeping in view the time and resources constraints it was decided that from each class date of birth of 20 students would be obtained to calculate different age groups. Detail of sample districts and school selection is given in tables below:-

Table 3.2.1 Sample Districts

S#	Province/Region	Sample Districts	No. of Sample Districts
1.	Punjab	Lahore, Bahawalpur.	02
2.	Sindh	Karachi and Sukkar	02
3.	Balochistan	Quetta and Pishin	02
4.	Khyber Pakhtunkhwa (KP)	Peshawar, Mansehra and Khyber Agency	03
5.	Azad Jammu and Kashmir (AJK)	Mirpur	01
6.	Gilgit-Baltistan (GB)	Gilgit	01
7	Islamabad Capital Territory (ICT)	Islamabad	01
		Total	12

Table 3.2.2
Detail of Per District Sample Schools (Public and Private)

		Public	Sector		D • 4			NI G
Level	Во	ys	Gir	rls	Private Sector	Total	Classes	500 300 120 240
	Urban	Rural	Urban	Rural	Sector			Students
Primary	1	1	1	1	1	5	1 to 5	500
Middle	1	1	1	1	1	5	6 to 8	300
Secondary	1	-	1	-	1	3	9 to 10	120
Higher Sec.	1	-	1	-	1	3	9 to 12	240
Total	4	2	4	2	4	16	-	1160

<sup>\* (20</sup> Students per class from each district)

It is pertinent to mention that age specific data was collected from total 13271 students (Primary 5755, Middle 3570, Secondary 2887 and Higher Secondary 1059) from 12 sample districts.

# 3.3 Research Instrument of Study

A proforma was designed to get basic information about schools and to collect date of birth of students (*Annexure -I*). These dates were used to calculate students' age.

# 3.4 Pilot Testing of Research Instruments

The instrument was pilot tested in Tehsil Murree district Rawalpindi. In light of the feedback received by the result of pilot testing, necessary changes were incorporated in the research instrument.

# 3.5 Data Collection and Analysis

The Research Team of AEPAM visited 12 sample districts of four provinces along with region of Azad Jammu & Kashmir and Gilgit-Baltistan to collect required data. Collected data was tabulated and analyzed within the context of objectives of the study.

# 3.6 Findings, Conclusions and Recommendations

On the basis of data analysis, findings, conclusions were drawn within the purview of the objectives of the study.



# **DATA ANALYSIS AND INTERPRETATION**

his section presents analysis and interpretation of data which was collected through prescribed proforma from schools of sample districts. It is imperative to note that for calculation of age, one cut-off date is to be determined. For this study, I<sup>st</sup> March was cut off date for Balochistan and Gilgit Baltistan while the cut-off date for other provinces was I<sup>st</sup> April. On the basis of this cutoff date age of the students was calculated. It is also stated that age for specified level was taken as notified and on the basis of which NEMIS calculates different indicators. According to Pakistan Education Statistics Report 2016-2017 the age for primary schools is 5-9, Middle 10-12, Secondary 13-14 and Higher Secondary 15-16 years. The collected data was analyzed on the basis of their age brackets and results are presented in the following tables.

# 4.1 Distribution of Age Groups at Primary Level in Pakistan

Table 4.1.1 Age Specific Enrolment at Primary Level (Public + Private) Sector

	Duarin and				Age (	Froups			
S#	Provinces/	≤04	<b>1</b> +	05 to	09+	≥1	0+	To	tal
	Regions	f	%	f	%	f	%	N	%
1	Pakistan	135	2	4047	71	1573	27	5755	100
2	Punjab	13	1	650	67	315	32	978	100
3	Sindh	7	1	614	67	291	32	912	100
4	KP	21	2	794	72	280	26	1095	100
5	Balochistan	41	5	556	70	193	25	790	100
6	GB	29	6	353	73	103	21	485	100
7	FATA	12	2	390	78	98	20	500	100
8	AJK	7	1	325	66	163	33	495	100
9	ICT	5	1	365	73	130	26	500	100

f = frequency N =

N=Total Number

Table 4.1.1 shows that 27% enrolled students of primary school in both public and private sectors were found overage in Pakistan. Cross provinces data show that in

AJK 33% enrolled students were found overage followed by Sindh and Punjab 32% in both sectors. Only 2% enrolled students were found underage in Pakistan, whereas, in GB 6% and in Balochistan 5% underage students were enrolled in primary schools of both public and private sectors.

Data show that 71% students of primary schools public and private in Pakistan have been enrolled as per their specified age group of 5 to 9 years. Data further indicate that in FATA 78% students of age group 5 to 9 years have been enrolled, followed by 73% in ICT and GB, whereas 72% in KP. In Balochistan 70%, Sindh and Punjab 67%, AJK 66% student have been enrolled according to age group 5 to 9 years in primary schools. The highest percentage of overage students is in AJK i.e. 33%.

#### 4.1.2 Distribution of Age Groups at Primary Level (Public Sector)

Table 4.1.2
Age Specific Enrolment Primary Level (Public Sector)

	Duarin and	Age Groups								
S#	Provinces/	≤04	1+	05 to	09+	≥10	)+	To	tal	
	Regions	f	%	f	%	f	%	N	%	
1	Pakistan	114	2	3180	69	1341	29	4635	100	
2	Punjab	12	1	511	66	255	33	778	100	
3	Sindh	7	1	523	66	256	33	786	100	
4	KP	19	2	634	71	247	27	900	100	
5	Balochistan	39	7	403	68	148	25	590	100	
6	GB	26	7	273	71	87	22	386	100	
7	FATA	4	1	307	77	89	22	400	100	
8	AJK	3	1	239	60	153	39	395	100	
9	ICT	4	1	290	72	106	27	400	100	

f = frequency N = Total Number

Table 4.1.2 indicates that 29% enrolled students of primary school in public sector were overage in Pakistan. Cross provinces data show that in AJK 39% enrolled students were found overage followed by Sindh and Punjab 33%. Overall 2% enrolled students were found underage, whereas, in GB and Balochistan 7% enrolled students were found underage in primary schools of public sector.

Moreover, 69% students in public sector primary schools have been enrolled of official age group 5 to 9 years. Province and regions wise data show that in FATA 77%, ICT 72%, GB & KP 71%, Sindh and Punjab 66% student have been enrolled in public sector primary schools of official age group 5 to 9 years.

# **4.1.3** Age Groups at Primary Level (Private Sector)

Table 4.1.3
Age Specific Enrolment Primary Level (Private Sector)

	D				Age G	roups			
S#	Provinces/ Regions	≤04	1+	05 to	09+	≥1	0+	To	tal
	Regions	f	%	f	%	f	%	N	%
1	Pakistan	21	2	867	77	232	21	1120	100
2	Punjab	1	1	139	69	60	30	200	100
3	Sindh	0	0	91	72	35	28	126	100
4	KP	2	1	160	82	33	17	195	100
5	Balochistan	2	1	153	77	45	22	200	100
6	GB	3	3	80	81	16	16	99	100
7	FATA	8	8	83	83	9	9	100	100
8	AJK	4	4	86	86	10	10	100	100
9	ICT	1	1	75	75	24	24	100	100

f = frequency

N=Total Number

Table 4.1.3 depicts that 21% enrolled students of primary school in private sector were found overage at national level. Cross provinces data indicates that among primary schools of private sector in Punjab 30% enrolled students were found overage followed by Sindh 28% and 24% ICT. Only 2% enrolled students were found underage at national level, whereas, in FATA 8% underage enrolled students were found in primary schools of private sector.

So far as specific official age group 5 to 9 years are concerned data depict that 77% students enrolled in private sector were within age group 5 to 9 years. Across country data indicate that in AJK 86%, FATA 83%, GB 81%, KP 82%, Balochistan 77%, Sindh 72% and Punjab 69% students have been enrolled within official age group 5 to 9 years in private sector primary schools.

#### 4.1.4 Comparison of Public and Private Sectors of Age Groups at Primary Level

Table 4.1.4
Age Specific Enrolment
Comparison of Public and Private Sectors at Primary Level

	Age Groups											
Provinces/	Public						Private					
Regions	≤04+		05 to 09+		≥10+		≤04+		05 to 09+		≥10+	
	f	%	f	<b>%</b>	f	%	f	%	f	%	f	%
Pakistan	114	2	3180	69	1341	29	21	2	867	77	232	21
Punjab	12	1	511	66	255	33	1	1	139	69	60	30
Sindh	7	1	523	66	256	33	0	0	91	72	35	28
KP	19	2	634	71	247	27	2	1	160	82	33	17
Balochistan	39	7	403	68	148	25	2	1	153	77	45	22
GB	26	7	273	71	87	22	3	3	80	81	16	16
FATA	4	1	307	77	89	22	8	8	83	83	9	9
AJK	3	1	239	60	153	39	4	4	86	86	10	10
ICT	4	1	290	72	106	27	1	1	75	75	24	24

f = frequency

Table 4.1.4 shows a comparison of public and private sectors at primary level with respect to official age group, overage and underage students at provincial/regional level. In Pakistan 29% students in public sector schools and 21% in private sector schools were found overage. Cross province in public sector data show that 39% in AJK, followed by Punjab and Sindh both 33% enrolled students were found overage. Similarly, in private sector 30% enrolled students were found overage in Punjab followed by Sindh 28%. Overall in Pakistan 2% enrolled students were found underage in both public and private sector. In Balochistan and Sindh public sector 7% and FATA in private sector 8% enrolled students were found underage.

Data further show that 69% students in public sector are of official age group 5 to 9 years, whereas in private sector it is 77%. At provincial/regional level FATA was identified with the highest percentage 77% of official age group students at primary level and AJK has the lowest percentage 60% of official age group students, at primary level in public sector schools. In case of private sector situation AJK is quite different, data show that at primary level the highest percentage of official age group students 86% is enrolled in AJK. Among provinces Punjab has the lowest percentage of official age group students at primary level in public as 66% and 69% in private sector.

Public versus private sector comparison of official age group at primary level show that at national level as well as in all provinces/regions percentage of official age group in private sector is comparatively higher than in public sector.

# 4.2 Age Groups at Middle level in Pakistan

Table 4.2.1
Age Specific Enrolment at Middle Level (Public + Private) Sector

	D				Age	Groups			
S#	Provinces/ Regions	≤9	+	10 to	12+	≥13	<b>3</b> +	Total	
	Regions	f	%	f	%	f	%	N	%
1	Pakistan	123	3	1896	53	1551	44	3570	100
2	Punjab	20	3	398	54	320	43	738	100
3	Sindh	14	3	256	50	242	47	512	100
4	KP	23	4	333	55	244	41	600	100
5	Balochistan	21	4	291	50	270	46	582	100
6	GB	30	12	152	60	72	28	254	100
7	FATA	0	0	185	62	115	38	300	100
8	AJK	8	3	140	47	152	50	300	100
9	ICT	7	2	141	50	136	48	284	100

f = frequency

N=Total Number

Table 4.2.1 illustrates that 44% students were found overage in middle schools in both public and private sectors. The percentage of overage group range from 28% to 50%, which indicates that majority of students in middle schools were above the specified age group i.e. 10 to 12 years. The highest percentage of overage students was found in AJK 50% followed by ICT 48%. Overall in Pakistan 3% enrolled students were found underage and the highest percentage of underage students was found in GB i.e. 12%.

Data show that 53% enrolled students in public and private in middle school have official age group 10 to 12 years. Data further show that in FATA 62%, KP 55%, GB 60%, Punjab 54%, Sindh, Balochistan & ICT 50%, AJK 47% enrolled students were found within age group 10 to 12 years in middle schools. This is a serious policy issue needed to be addressed

### **4.2.2** Age Groups at Middle Level (Public Sector)

Table 4.2.2
Age Specific Enrolment at Middle Level (Public Sector)

	D				Age	Groups			
S#	Provinces/	≤9	+	10 to	12+	≥1.	3+	Total	
	Regions	f	%	F	%	f	%	N	%
1	Pakistan	93	3	1433	51	1291	46	2817	100
2	Punjab	20	3	331	54	267	43	618	100
3	Sindh	12	3	209	52	183	45	404	100
4	KP	17	4	250	52	213	44	480	100
5	Balochistan	18	4	213	46	231	50	462	100
6	GB	16	11	91	61	42	28	149	100
7	FATA	0	0	133	55	107	45	240	100
8	AJK	6	3	99	41	135	56	240	100
9	ICT	4	2	107	48	113	50	224	100

f = frequency N = Total Number

Table 4.2.2 indicates that 46% enrolled students were found overage in public sector. The overage students' range is between 28% to 56% in public sector middle schools in Pakistan and AJK has the highest percentage of overage students i.e. 56% followed by ICT and GB 50%. Data show that in Pakistan overall 3% enrolled students were found underage and the highest percentage of underage students was found in GB i.e. 11%.

Data show 51% enrolled students were found within age group 10 to 12 years overall in Pakistan. Cross provinces data show that in Punjab 54%, Sindh & KP 52%, Balochistan 46%, GB 61%, AJK 41% and ICT 48% students were studying within official age group 10 to 12 years in middle schools public sector

## **4.2.3** Age Groups at Middle Level (Private Sector)

Table 4.2.3
Age Specific Enrolment at Middle Level (Private Sector)

	D				Age G	roups			
S#	Provinces/	≤9	)+	10 to	12+	≥1	3+	Total	
	Regions	f	%	f	%	f	%	N	%
1	Pakistan	30	4	463	61	260	35	753	100
2	Punjab	0	0	67	56	53	44	120	100
3	Sindh	2	2	47	43	59	55	108	100
4	KP	6	5	83	69	31	26	120	100
5	Balochistan	3	3	78	65	39	32	120	100
6	GB	14	13	61	58	30	29	105	100
7	FATA	0	0	52	87	8	13	60	100
8	AJK	2	3	41	69	17	28	60	100
9	ICT	3	5	34	57	23	38	60	100

f = frequency N = Total Number

Table 4.2.3 presents that 35% enrolled students were found overage in private sector. The highest overage percentage was 55% found in Sindh followed by Punjab 44%, ICT 38% and Balochistan 32%. Overall 4% students were found underage and 13% students were found underage in GB.

Data show that 61% students enrolled in private sector in middle schools were found within official age group 10 to 12 years. In FATA 87%, AJK 69%, ICT 57%, KP 69%, Balochistan 65%, Sindh 43% and Punjab 56% students were found within age group 10 to 12 years in middle schools of private sector.

Age specific enrolment in private sector at middle level is the lowest in Sindh i.e. 43%. These figures show that majority of students are above the official age group and the age brackets need to revise by policy makers.

### 4.2.4 Comparison of Age Groups at Middle Level (Public and Private)

Table 4.2.4
Age Specific Enrolment
Comparison of Public and Private Sectors at Middle Level

					A	ge Gı	coups						
Provinces/			Pul	blic					Priva	ate			
Regions	0			10 to 12+		≥13+		≤09+		10 to 12+		≥13+	
	f %		f	%	f	%	f	%	f	%	f	%	
Pakistan	93	3	1433	51	1291	46	30	4	463	61	260	35	
Punjab	20	3	331	54	267	43	0	0	67	56	53	44	
Sindh	12	3	209	52	183	45	2	2	47	43	59	55	
KP	17	4	250	52	213	44	6	5	83	69	31	26	
Balochistan	18	4	213	46	231	50	3	3	78	65	39	32	
GB	16	11	91	61	42	28	14	13	61	58	30	29	
FATA	0	0	133	55	107	45	0	0	52	87	8	13	
AJK	6	3	99	41	135	56	2	3	41	69	17	28	
ICT	4	2	107	48	113	50	3	5	34	57	23	38	

f = frequency

Table 4.2.4 shows a comparison of public and private sectors at national level as well as at provincial level for students at middle school having official age group, overaged and under aged. At national level 46% students in public schools and 35% in private sector schools were found above 13 years of age. When we look at private sector schools data indicates that percentage of overage students is 55% in Sindh and 44% in Punjab.

Overall in Pakistan 3% in public sector and 4% in private sector students were found underage. GB has the highest underage students in both public 11% and private 13% sector.

Data further illustrate that 51% enrolled students in public sector and 61% in private sector were found of official age group. The cross provinces data show that GB has 61% the highest percentage of official age group in public sector, whereas in private sector FATA 87% has highest enrolled students of official age group 10 to 12 years.

# 4.3 Age Groups at Secondary Level in Pakistan

Table 4.3.1
Age Specific Enrolment at Secondary Level (Public and Private) Sector

	Provinces/				Age (	Groups			
S#		≤1:	2+	13 to	14+	≥15	5+	Total	
	Regions	f	%	f	%	f	%	N	%
1	Pakistan	231	8	1375	48	1281	44	2887	100
2	Punjab	67	9	312	44	327	47	706	100
3	Sindh	25	6	201	46	213	48	439	100
4	KP	16	3	237	50	227	47	480	100
5	Balochistan	22	6	168	42	210	52	400	100
6	GB	73	30	131	55	36	15	240	100
7	FATA	0	0	134	67	66	33	200	100
8	AJK	17	9	92	46	91	45	200	100
9	ICT	11	5	100	45	111	50	222	100

f = frequency N = Total Number

Table 4.3.1 indicates that 44% enrolled students were found overage in secondary schools in both sectors. (The percentage of overage students is 52% in Balochistan, 50% in ICT, 48% in Sindh, 47% in Punjab and 15% in GB). As far as underage is concerned data shows that 8% enrolled students were found underage in both sectors in secondary schools of Pakistan. Cross provinces data indicates that GB has highest percentage 30% followed by AJK, Punjab, Sindh and Balochistan.

Data show that 48% enrolled students in secondary schools public and private sector schools of Pakistan were found within age group 13 to 14 years. Further cross province wise data indicates that students within range of official age group for secondary classes i.e. 13 to 14 years were found 42% to 67%. The highest percentage of official age group enrolled students 13 to 14 years were found 67% in FATA, followed by GB 55%, KP 50%, Sindh and AJK 46%, ICT 45% and Punjab 44%.

### 4.3.2 Age Groups at Secondary Level (Public Sector)

Table 4.3.2
Age Specific Enrolment at Secondary Level (Public Sector)

	Duarin and				Age	Groups			
S#	Provinces/	≤12	2+	13 to	14+	≥1:	5+	Total	
	Regions	f	%	f	%	f	%	N	%
1	Pakistan	162	8	953	44	1044	48	2159	100
2	Punjab	56	9	252	42	292	49	600	100
3	Sindh	21	7	135	42	163	51	319	100
4	KP	11	3	142	45	167	52	320	100
5	Balochistan	19	6	124	39	177	55	320	100
6	GB	44	27	81	51	35	22	160	100
7	FATA	0	0	100	62	60	38	160	100
8	AJK	4	3	55	46	61	51	120	100
9	ICT	7	4	64	40	89	56	160	100

f = frequency

N=Total Number

Table 4.3.2 indicates that 48% enrolled students were found overage in public sector. The overage students range is between 22% to 56% in public sector secondary schools. ICT has the highest percentage of overage students i.e. 56% followed by Balochistan 55% and KP 52%. Data show that in Pakistan overall 8% enrolled students were found underage and the highest percentage of underage students was found in GB i.e. 27%, followed by Punjab 9%, Sindh 7% and Balochistan 6% at secondary school level.

It was found that 44% enrolled students in public sector secondary schools were within official age group 13 to 14 years. Province-wise data show that the highest percentage of official age group was found in FATA 62%, followed by GB 51% and AJK 46%, KP 45%, Sindh and Punjab 42%.

### **4.3.3** Age Groups at Secondary Level (Private Sector)

Table 4.3.3
Age Specific Enrolment at Secondary Level (Private Sector)

	D				Age	Groups			
S#	Provinces/	≤12	2+	13 to	14+	≥1	5+	Total	
	Regions	f	%	f	%	f	%	N	%
1	Pakistan	69	9	422	58	237	33	728	100
2	Punjab	11	10	60	57	35	33	106	100
3	Sindh	4	3	66	55	50	42	120	100
4	KP	5	3	95	59	60	38	160	100
5	Balochistan	3	4	44	55	33	41	80	100
6	GB	29	36	50	63	1	1	80	100
7	FATA	0	0	34	85	6	15	40	100
8	AJK	13	16	37	46	30	38	80	100
9	ICT	4	7	36	58	22	35	62	100

f = frequency

N=Total Number

Table 4.3.3 illustrates that 33% enrolled students in secondary schools in private sector were found overage. The percentage of overage student's range is 1% to 42%. The highest overage students were present in Sindh i.e. 42% followed by KP 41%. Data show that in Pakistan overall 9% enrolled students were found underage and the highest percentage of underage students was found in GB i.e. 36% followed by AJK 16% and Punjab 10%.

Data show that 58% enrolled students were within age group 13 to 14 years in private sector secondary schools. It is interesting to note that in FATA 85% enrolled students were found within official age group, in GB 63%, ICT 58%, Balochistan 55%, KP 59%, Sindh 55% and Punjab 57% enrolled students were found within official age group.

### 4.3.4 Comparison of Age Groups at Secondary Level (Public and Private)

Table 4.3.4
Age Specific Enrolment
Comparison of Public and Private Sectors at Secondary Level

					A	ge Gr	oups					
Provinces/			Pul	olic					Priva	ate		
Regions	≤12	2+	13 to 14+		≥15	≥15+		2+	13 to 14+		≥15+	
	f	%	f	%	f	%	f	%	f	%	f	%
Pakistan	162	8	953	44	1044	48	69	9	422	58	237	33
Punjab	56	9	252	42	292	49	11	10	60	57	35	33
Sindh	21	7	135	42	163	51	4	3	66	55	50	42
KP	11	3	142	45	167	52	5	3	95	59	60	38
Balochistan	19	6	124	39	177	55	3	4	44	55	33	41
GB	44	27	81	51	35	22	29	36	50	63	1	1
FATA	0	0	100	62	60	38	0	0	34	85	6	15
AJK	4	3	55	46	61	51	13	16	37	46	30	38
ICT	7	4	64	40	89	56	4	7	36	58	22	35

f = frequency

Table 4.3.4 shows a comparison of public and private sectors at national level and provincial level for students at secondary school having official age group, overage and underage. Data indicates those 48% students in public sector schools and 58% in private sector schools were found overage. In private sector schools the highest percentage of overage students was in Sindh 42% and ICT 56%, in public sector the highest percentage of overage students is in ICT 56%, followed by Balochistan 55%, KP 52%, AJK and Sindh 51%. In Pakistan overall 8% in public sector and 9% in private sector were found underage.

So far enrolled students as official age 13 to 14 years are concerned their numbers are 44% in public and 58% in private sector. Cross province wise data indicates the highest percentage of official age group students were found in FATA, 62% in public sector and 85% in private sector. The lowest percentage of official age group 13 to 14 years students were found 39% in public sector of Balochistan and 46% in private sector of AJK among secondary schools.

# 4.4 Age Groups at Higher Secondary Level in Pakistan

Table 4.4.1 Age Specific Enrolment at Higher Secondary Level (Public and Private) sector

	Duarin and				Age	Groups			
S#	Provinces/	≤14	1+	15 to	o <b>16</b> +	≥1′	7+	Total	
	Regions	f	%	f	%	f	%	N	%
1	Pakistan	50	5	494	46	515	49	1059	100
2	Punjab	18	6	95	34	167	60	280	100
3	Sindh	4	2	68	49	68	49	140	100
4	KP	4	2	124	51	112	47	240	100
5	Balochistan	0	0	10	50	10	50	20	100
6	GB	13	13	63	63	24	24	100	100
7	FATA	1	1	58	73	21	26	80	100
8	AJK	3	4	29	36	48	60	80	100
9	ICT	7	6	47	39	65	55	119	100

f = frequency

N=Total Number

Table 4.4.1 depicts that 49% enrolled students in higher secondary schools were found overage. Cross provinces data indicate that in Punjab and AJK 60%, Sindh 49%, KP 47%, Balochistan 50% and ICT 55% students were overage. Data show that in Pakistan 5% enrolled students were found underage and the highest percentage of underage students was found in GB i.e. 13% followed by Punjab and ICT 6%.

So far as official age group 15 to 16 years is concerned data indicates that 46% enrolled students were found of this age group in higher secondary schools at national level. FATA has the highest percentage 73% followed by GB 63% and KP 51%, Balochistan 50% of official age group students 15 to 16 years.

### 4.4.2 Age Groups at Higher Secondary Level (Public Sector)

Table 4.4.2
Age Specific Enrolment at Higher Secondary Level (Public Sector)

	Provinces/				Age G	roups			
S#		≤14	<b>1</b> +	15 to	16+	≥1	<b>7</b> +	To	tal
	Regions	f	%	f	%	f	%	N	%
1	Pakistan	34	4	344	44	401	52	779	100
2	Punjab	15	6	73	31	152	63	240	100
3	Sindh	4	4	52	52	44	44	100	100
4	KP	1	1	71	44	88	55	160	100
5	Balochistan	0	0	10	50	10	50	20	100
6	GB	6	10	38	63	16	27	60	100
7	FATA	1	1	58	73	21	26	80	100
8	AJK	2	5	19	48	19	47	40	100
9	ICT	5	6	23	29	51	65	79	100

f = frequency

N=Total Number

Table 4.4.2 shows that 52% enrolled students were overage at national level. Cross provinces data indicate that in ICT 65%, Punjab 63%, KP 55%, Balochistan 50%, AJK 47%, and Sindh 44% students were found overage. Data show that in Pakistan overall 4% enrolled students were found underage. The highest percentage of underage students was found in GB i.e. 10% followed by Punjab and ICT 6%.

So far as the official age group 15-16 years is concerned data show that at national level 44% enrolled students in higher secondary schools in public sector were found in this age group. The cross provinces data indicate that the highest 73% in FATA, 63% in GB and 52% in Sindh enrolled students were found within official age group 15 to 16 years in public sector higher secondary schools.

### 4.4.3 Age Groups at Higher Secondary Level (Private Sector)

Table 4.4.3
Age Specific Enrolment at Higher Secondary Level (Private Sector)

	Duarin and				Age	Groups			
S#	Provinces/	≤1	4+	15 to	16+	≥1′	7+	To	tal
	Regions	f	%	f	%	f	%	N	%
1	Pakistan	16	6	150	53	114	41	280	100
2	Punjab	3	8	22	55	15	37	40	100
3	Sindh	0	0	16	40	24	60	40	100
4	KP	3	4	53	66	24	30	80	100
5	Balochistan	0	0	0	0	0	0	0	0
6	GB	7	18	25	62	8	20	40	100
7	FATA	0	0	0	0	0	0	0	0
8	AJK	1	3	10	25	29	72	40	100
9	ICT	2	5	24	60	14	35	40	100

f = frequency Total Number = In Balochistan no higher secondary school in private sector

Table 4.4.3 presents that 41% enrolled students were found overage in higher secondary schools of Pakistan. Data further show that the highest overage group was 72% found in AJK followed by Sindh 60%, Punjab 37% and KP 30%.

Overall 6% enrolled students were found underage in private sector in Pakistan. The highest percentage of underage students was found in GB 18% followed by Punjab 8% and 5% in ICT in private sector higher secondary schools.

Table 4.4.3 indicates that 53% enrolled students in private sector in higher secondary schools were within official age group 15 to 16 years. Cross provinces data indicates that in KP 66%, GB 62%, ICT 60%, Punjab 55% enrolled students were within age group 15 to 16 years. These figures show that majority of students are above the official age group and the age brackets need revision.

# **4.4.4** Comparison of Age Groups at Higher Secondary Level (Public and Private)

Table 4.4.4
Age Specific Enrolment
Comparison of Public and Private Sector at Higher Secondary Level

					A	ge Gr	coups					
Provinces/			Pul	blic					Priva	ate		
Regions	≤14	<b>1</b> +	15 to	16+	≥17	7+	≤1	4+	15 to	16+	≥17	7+
	f %		f	%	f	%	f	%	f	%	f	%
Pakistan	34	4	344	44	401	52	16	6	150	53	114	41
Punjab	15	6	73	31	152	63	3	8	22	55	15	37
Sindh	4	4	52	52	44	44	0	0	16	40	24	60
KP	1	1	71	44	88	55	3	4	53	66	24	30
Balochistan	0	0	10	50	10	50	0	0	0	0	0	0
GB	6	10	38	63	16	27	7	18	25	62	8	20
FATA	1	1	58	73	21	26	0	0	0	0	0	0
AJK	2	5	19	48	19	47	1	3	10	25	29	72
ICT	5	6	23	29	51	65	2	5	24	60	14	35

f = frequency

Table 4.4.4 indicates that 52% and 41% students were found overage in higher secondary schools of public sector and private sector respectively. It is very important to note that 65% enrolled students in higher secondary public schools of Islamabad were overage. The highest overage students were present in private sector schools of AJK 72%. The percentage of overage students in Sindh is 60% Punjab 37%, ICT 35% in GB in private sector higher secondary schools. In public sector higher secondary schools in Punjab 63% and ICT 65% students are above official age group.

Data show that 44% and 53% enrolled students enrolled in higher secondary schools public and private sector respectively were found within official age group. Data further show that FATA has the highest 73% in public sector and KP has the highest 66% in private sector percentage of enrolled students within official age group 15 to 16 years.

# 4.5 Age Specific Trends

Table 4.5.1 Sector wise/Level wise Comparison of Age Specific Enrolment Pakistan

		Public (%)		Private (%)			
Pakistan	Under Age	Official Age	Overage	Under Age	Official Age	Overage	
Primary	2	69	29	2	77	21	
Middle	3	51	46	4	61	35	
Secondary	8	44	48	9	58	33	
Higher Sec.	4	44	52	6	53	41	

Figure 1 Pakistan

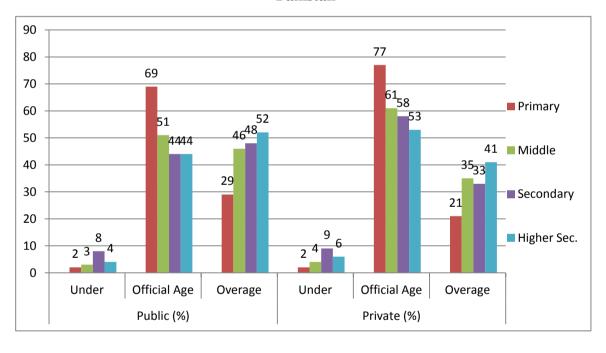


Table 4.5.2 Age Specific Enrolment Punjab

		Public (%)	Private (%)				
Punjab	Under Age	Official Age	Overage	Under Age	Official Age	Overage	
Primary	1	66	33	1	69	30	
Middle	3	54	43	0	56	44	
Secondary	9	42	49	10	57	33	
Higher Sec.	6	31	63	8	55	37	

Figure 2 Punjab

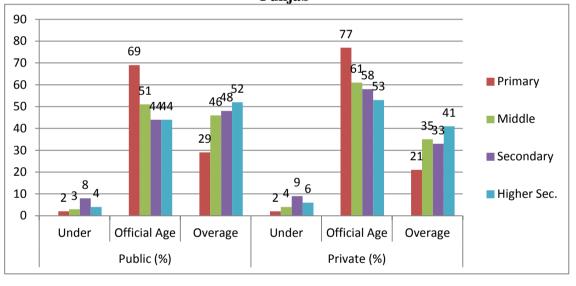


Table 4.5.3 Age Specific Enrolment Sindh

		Public (%)	Private (%)			
Sindh	Under Age	Official Age	Overage	Under Age	Official Age	Overage
Primary	1	66	33	0	72	28
Middle	3	52	45	2	43	55
Secondary	7	42	51	3	55	42
Higher Sec.	4	52	44	0	40	60

Figure 3 Sindh

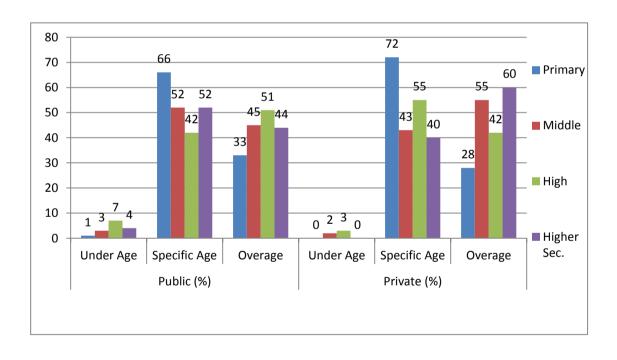


Table 4.5.4 Age Specific Enrolment Khyber Pakhtunkhwa

Vhyhou		Public (%)		Private (%)			
Khyber Pakhtunkhwa	Under Age	Official Age	Overage	Under Age	Official Age	Overage	
Primary	2	71	27	1	82	17	
Middle	4	52	44	5	69	26	
Secondary	3	45	52	3	59	38	
Higher Sec.	1	44	55	4	66	30	

Figure 4 Khyber Pakhtunkhwa

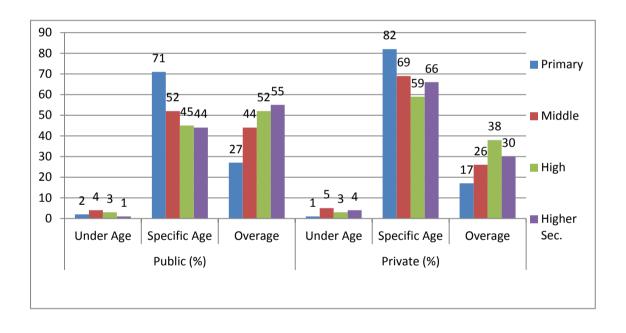


Table 4.5.5 Age Specific Enrolment Balochistan

		Public (%)		Private (%)			
Balochistan	Under Age Official Age O		Overage	Under Age	Official Age	Overage	
Primary	7	68	25	1	77	22	
Middle	4	46	50	3	65	32	
Secondary	6	39	55	4	55	41	
Higher Sec.	0	50	50	0	0	0	

Figure 5 Balochistan

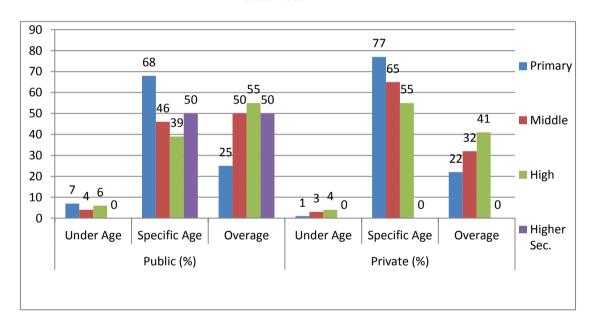


Table 4.5.6 Age Specific Enrolment Gilgit Baltistan

Cilait		Public (%)		Private (%)			
Gilgit Baltistan	Under Age	( )fficial Age   (		Under Age	Official Age	Overage	
Primary	7	71	22	3	81	16	
Middle	11	61	28	13	58	29	
Secondary	27	51	22	36	63	1	
Higher Sec.	10	63	27	18	62	20	

Figure 6 Gilgit Baltistan

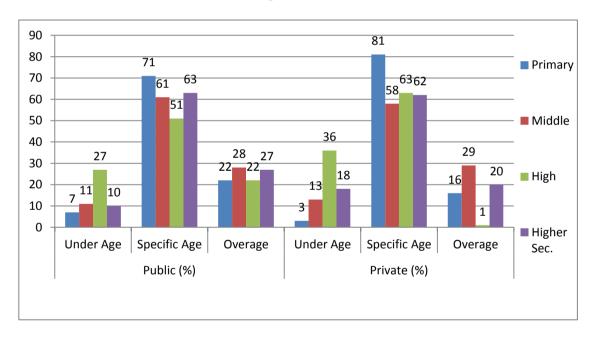


Table 4.5.7 Age Specific Enrolment FATA

		Public (%)		Private (%)			
FATA	Under Age	Official Age	Overage	Under Age	Official Age	Overage	
Primary	1	77	22	8	83	9	
Middle	0	55	45	0	87	13	
Secondary	0	62	38	0	85	15	
Higher Sec.	1	73	26	0	0	0	

Figure 7 FATA

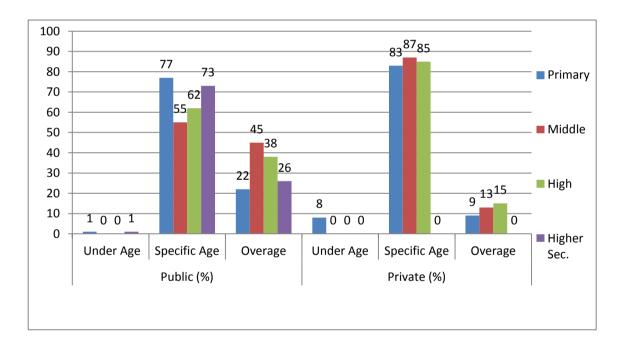


Table 4.5.8 Age Specific Enrolment AJK

		Public (%)		Private (%)			
AJK	Under Age	Official Age	Overage	Under Age	Official Age	Overage	
Primary	1	60	39	4	86	10	
Middle	3	41	56	3	69	28	
Secondary	3	46	51	16	46	38	
Higher Sec.	5	48	47	3	25	72	

Figure 8 AJK

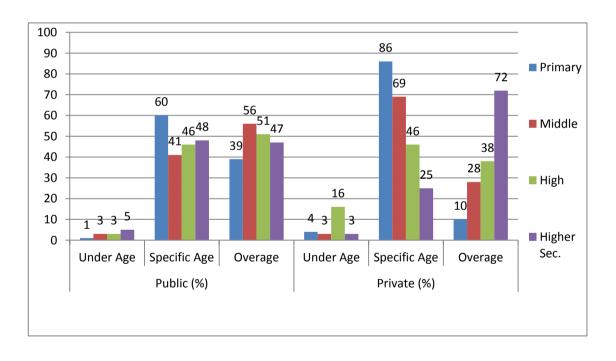
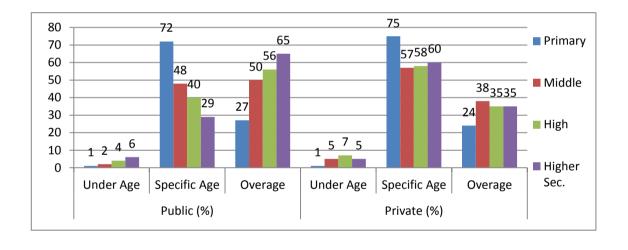


Table 4.5.9 Age Specific Enrolment ICT

		Public (%)		Private (%)			
ICT	Under Age	Official Age	Overage	Under Age	Official Age	Overage	
Primary	1	72	27	1	75	24	
Middle	2	48	50	5	57	38	
Secondary	4	40	56	7	58	35	
Higher Sec.	6	29	65	5	60	35	

Figure 9 ICT



# 4.6 Level wise Comparison of Different Age Groups

Table 4.6.1
Level Wise Percentage of Students within Specified Age Group

Province/	Primary %	Middle %	Secondary %	Higher Sec %
Region	5 to 9 Years	10 to 12 Years	13 to 14 Years	15 to 16 Years
Pakistan	71	53	48	46
Punjab	67	54	44	34
Sindh	67	50	46	49
KP	72	55	50	51
Balochistan	70	50	42	50
GB	73	60	55	63
FATA	78	62	67	73
AJK	66	47	46	36
ICT	73	50	45	39

Table 4.6.1 illustrates that 71% enrolled students at primary level have official age group 5 to 9 years. However, at middle level it decreased to 53% at secondary 48% and finally at higher secondary to 46%. It is interesting to note that FATA has the highest percentage of official age students from primary to higher secondary level i.e. 78%, 62%, 67% and 73% respectively. There is a decrease in percentage of official age students from primary to middle level, whereas for secondary to higher secondary level there is an increase in percentage of official age students.

Table 4.6.2
Level Wise Comparison of Public and Private Sectors Students within Specified Age Groups

Province/	Primary %		Mid	Middle %		Secondary %		Higher Sec %	
Region	Public	Private	Public	Private	Public	Private	Public	Private	
Pakistan	69	77	51	61	44	58	44	53	
Punjab	66	69	54	56	42	57	31	55	
Sindh	66	72	52	43	42	55	52	40	
KP	71	82	52	69	45	59	44	66	
Balochistan	68	77	46	65	39	55	50	0	
GB	71	81	61	58	51	63	63	62	
FATA	77	83	55	87	62	85	73	0	
AJK	60	86	41	69	46	46	48	25	
ICT	72	75	48	57	40	58	29	60	

Table 4.6.2 depicts comparison of various levels of public and private sectors enrolled students. Data show that in private 77% enrolled students have official age 5 to 9 years as compared to public 69%. Similarly private sector has more number of official age group students at middle, secondary and higher secondary levels as compared to public sector, i.e. at middle level in private 61%, secondary 58% and higher secondary 53% as compare to public at middle 51%, secondary 44% and higher secondary 44% respectively. It is encouraging to note that FATA has the highest number of official age group students in public as well in private sectors except in public sector elementary schools.

- Cross province data show that at primary level Punjab has the lowest percentage of official age students in public and private sector.
- At elementary level public sector of AJK 41% and private sector of Sindh 43% have the lowest percentage of official age students.
- At secondary level the lowest percentages of official age students were found in Balochistan public sector 39%, ICT public sector 40% and in AJK 46% both in public and private sector.
- At higher secondary level, the lowest percentage of official age students was identified in ICT as 29% and 25% in private sector of AJK.

Table 4.6.3 Underage Students (Level Wise)

Province/ Region	Primary (%)	Middle (%)	Secondary (%)	Higher Secondary (%)
Pakistan	2	3	8	5
Punjab	1	3	9	6
Sindh	1	3	6	2
KP	2	4	3	2
Balochistan	5	4	6	0
GB	6	12	30	13
FATA	2	0	0	1
AJK	1	3	9	4
ICT	1	2	5	6

Table 4.6.3 presents underage students and data indicate that GB has more number of underage students as compared to other provinces, particularly at secondary level 30% and at higher secondary level 13%.

Figure 10 Underage Students (Level Wise)

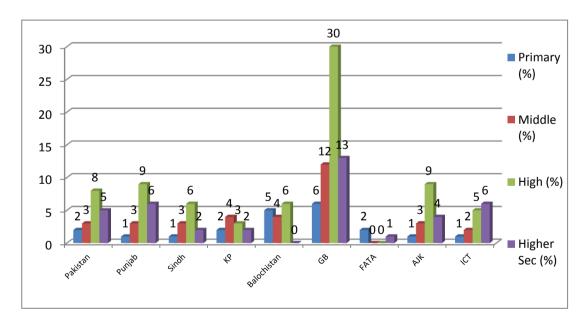
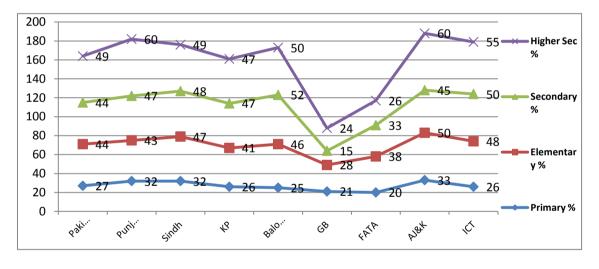


Table 4.6.4 Overage Students (Level Wise)

Province/ Region	Primary (%)	Middle (%)	Secondary (%)	Higher Secondary	
Pakistan	27	44	44	49	-51
Punjab	32	43	47	60	-40
Sindh	32	47	48	49	-51
KP	26	41	47	47	-53
Balochistan	25	46	52	50	100
GB	21	28	15	24	-76
FATA	20	38	33	26	30
AJK	33	50	45	60	-40
ICT	26	48	50	55	-45

Figure 11 Graphic Presentation of Overage Students (Level Wise)



- There is a continuous increase in overage students at national level from primary to higher secondary level.
- The highest overage students at primary level are identified in AJK 33%, followed by Punjab and Sindh 32%.
- At primary level over all 27%, students are overage, whereas this percentage for middle and secondary increases 44% and at higher secondary level it reaches to 49%.

- The highest overage students at middle level are identified in AJK 50%, followed by ICT 48%, Sindh 47%.
- The highest percentage of overage students at secondary level is identified in Balochistan 52%, followed by ICT 50%, Sindh 48%, Punjab and KP 47%.
- At higher secondary level, the highest percentage of overage students is identified in FATA and Punjab 60% followed by ICT 55%, Balochistan 50% and Sindh 49%.

Table 4.6.5
Summary of Underage, Overage and Official Specific Age Group
Students from Primary to Higher Secondary

Province/	Primary%				Middle%		Secondary%			Higher Sec%		
Region	<	5 to 9	>	<	10 to 12	>	٧	13 to 14	>	٧	15 to 16	^
Pakistan	2	71	27	3	53	44	8	48	44	5	46	49
Punjab	1	67	32	3	54	43	9	44	47	6	34	60
Sindh	1	67	32	3	50	47	6	46	48	2	49	49
KP	2	72	26	4	55	41	3	50	47	2	51	47
Balochistan	5	70	25	4	50	46	6	42	52	0	50	50
GB	6	73	21	12	60	28	30	55	15	13	63	24
FATA	2	78	20	0	62	38	0	67	33	1	73	26
AJK	1	66	33	3	47	50	9	46	45	4	36	60
ICT	1	73	26	2	50	48	5	45	50	6	39	55

Table 4.6.5 show comparison of underage, official age and overage enrolled students from primary to higher secondary. In Pakistan as per official age of various levels data indicates that at primary 71% middle, 53% secondary 48% and higher secondary 46% students lie within official age group. Cross provinces data indicate that FATA has the highest number of official age group students from primary to higher secondary levels. AJK has the lowest number of enrolled students of official age group.

- Level wise cross province data indicate that at primary level the lowest percentage of official age group was identified in AJK 66%.
- At middle level again AJK was identified as having the lowest percentage of official age group i.e. 47%.
- At secondary level Balochistan was identified as having the lowest percentage 42% of official age students.
- At higher secondary level, Punjab is identified, as having the lowest percentage i.e. 34% of official age students.

# FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

# 5.1 Findings

- 1. The study discovered that about 71% enrolled students of both public and private sectors fall within official age group i.e. (5-9 years) at primary level in Pakistan. The study found that the highest percentage of students i.e. 78% in primary school of both public and private sector lie within official age (5-9 years) in FATA, 73% in ICT, 72% in Khyber Pakhtunkhwa and Gilgit Baltistan. The lowest percentage of enrolled students at primary level of both public and private sectors who fall within official age group (5-9 years) were 66% in AJK. The study found that 27% enrolled students in both public and private primary schools were overage. Among provinces and regions AJK has the highest number of overage students i.e. 33% of both public and private sector at primary level followed by Sindh and Punjab where overage students at primary level were 32%. The study identified 2% underage students enrolled in both public and private primary schools in the country. The highest percentages i.e. 6% of underage students were found at primary level in Gilgit Baltistan and 5% in Balochistan.
- 2. The study revealed that about 53% enrolled students of both public and private sector fall within official age group i.e. (10-12 years) at middle level in the country. Among provinces/regions, the study identified the highest percentage of students i.e. 62% & 60% in middle school of both public and private sector lie within official age (10-12 years) in FATA and GB respectively. The lowest percentage i.e. 47% of enrolled students of both public and private sectors, which fall within official age group (10-12 years) were in AJK. The study discovered that 44% enrolled students in both public and private middle schools were overage. Among provinces and regions, AJK has the highest number of overage students. i.e. 50% of both public and private sector at middle level followed by ICT where overage students at middle level were 48%. The study identified 3% underage students enrolled in both public and private middle schools in the country. The highest percentage i.e. 12% of underage students were found at middle level in Gilgit Baltistan.
- 3. The study found that about half of enrolled students of both public and private sector fall within official age group i.e. 13-14 years at secondary level in Pakistan. The study identified two thirds enrolled students of both public and private sector at

secondary level in FATA fall within the official age group whereas, the lowest percentages of enrolled students at secondary level of both public and private sectors who fall within official age group (13-14 years) i.e. 44% were in Punjab followed by ICT i.e. 45%. The study revealed that 44% enrolled students in both public and private secondary schools were overage in the country. Among provinces and regions, Balochistan has the highest number of overage students i.e. 52% of both public and private sectors at secondary level followed by ICT where overage students at secondary level were 50%. The study found 8% underage students enrolled in both public and private secondary schools in the country. The highest percentage i.e. 30% of underage students was observed at secondary school level in Gilgit Baltistan.

4. The study identified that about 46% enrolled students of both public and private sectors fall within official age group i.e. 15-16 years at higher secondary level in Pakistan. The highest percentage of students i.e. 73% in higher secondary school of both public and private sector lie within official age (15-16 years) in FATA, 63% in GB, 51% in Khyber Pakhtunkhwa, 50% in Balochistan. The lowest percentage of enrolled students at higher secondary level of both public and private sectors who fall within official age group (15-16 years) were 34% in Punjab. The study found that 49% enrolled students in both public and private higher secondary schools were overage. Among provinces and regions, AJK and Punjab has the highest number of overage students i.e. 60% of both public and private sector at higher secondary level followed by ICT, where overage students at higher secondary level were 55%. The study discovered 5% underage students enrolled in both public and private higher secondary schools in the country. The highest percentage i.e. 13% of underage students was identified at higher secondary level in Gilgit Baltistan.

#### 5.2 Conclusions

On the basis of the findings the following conclusions were drawn.

- 1. The enrolled students at different levels of education were categorized as (i) students who fall within official age group of specific level of education (ii) overage students of specific level of education and (iii) underage students of specific level of education.
- 2. The findings of the study indicate that 71% enrolled students of both public and private sector at primary level fall within official age group, 53% students at middle level lie within official age group, 48% students at secondary level fall within official age group and 46% students at higher secondary level fall within official age group. It is concluded that about 59% percentage of students from primary to higher secondary fall within official age group 5-16. It was revealed that more students of private sector fall within official age group at all levels of education (primary to higher secondary) as compared to public sector.

- 3. It is concluded that FATA has the highest percentage i.e. 77% students of public primary schools who fall within official age group, whereas AJK has the lowest percentage of public primary school students who lie within official age group. Similarly, FATA has the highest percentage i.e. 62% of students at public secondary schools within official age group, whereas Punjab has the lowest percentage of public secondary school students within official age group. At the higher secondary level FATA has the highest percentage i.e. 73% of enrolled students in public schools within official age group, whereas, ICT has the lowest percentage of public higher secondary school students i.e. 29% within official age group.
- 4. It was also concluded that one third of enrolled students at primary level and around half of the students at middle, secondary and higher secondary level in both public and Private sectors were found overage.

### **5.3** Recommendations

- 1. UNESCO's Global Education maintains a database with entrance age and duration of primary education for 206 countries and territories. In 127 out of 206 countries, the official primary school entrance age is six years and 123 out of 206 countries have primary school duration of six grades. In Pakistan about one-third enrolled students at primary level of both public and private sectors are overage. It is therefore, recommended that official entrance age for primary education should be six years and official age group should 6 to 10 years instead of 5 to 9 years. Education policy 2009 proposed policy actions for ECE and it was recommended that ECE age group should be from 3 to 5 years. The findings of the present study support this policy action.
- 2. The findings of study indicate that percentage of overage students increases as the level of education increases, the percentage of overage students at primary level increased 27% to 49% at higher secondary level. There is a need to revise official age groups from primary to higher secondary. It is recommended that age group for primary should be 6-10 years, for middle level 11-13 years, similarly for secondary 14-15 years and 16-17 years for higher secondary level.
- 3. In E-9 countries school entrance age for secondary school ranges from 10 to 13 years. In 4 of 9 countries students enter secondary school at 11 years of age i.e. in Bangladesh, Brazil, Egypt and India). Whereas, secondary school education begins at 12 years in three countries i.e. China, Mexico and Nigeria. Again, Pakistan is an exception among E-9 countries where secondary education begins at 10 years. If the official age group of primary can be revised then there will be an automatic effect on entrance age of secondary school.
- 4. It is also recommended that all provincial/regional EMISs should collect accurate age specific data of enrolled students at all levels of education and maintain

this information in their databases. This data is used for computation of NER which is a key indicator of access to education.

5. Large number of overage and under age students is a challenge for teachers who are supposed to teach a more age diverse group with differing levels of maturity and school preparedness. This issue needs to be focused by researchers, to study the pace of learning of students of different age group in a same grade.

# **BIBLIOGRAPHY**

- Amakyi, M., & Ampah-Mensah, A. (2016). Dilemma of Access and Provision of Quality Basic Education in Central Region, Ghana. *Journal of Education and Practice*, 7(11), 61-65.
- Bibi, T. (2015). Article 25th A: Implications of Free and Compulsory Secondary Education. *VFAST Transactions on Education and Social Sciences*, 6(1). Retrieved October 15, 2018, from http://www.vfast.org/index.php/VTESS
- EPDC. (2007). School Attendance and Enrolment–Global trends and projections. Background paper prepared for the Education for All Global Monitoring Report. Retrieved October 16, 2018. https://unesdoc.unesco.org/ark:/48223/pf0000155501
- Government of Pakistan. (2014). Pakistan Education for ALL, Review Report 2015, Islamabad, NEMIS/Academy of Educational Planning and Management. https://files.eric.ed.gov/fulltext/EJ1099489.pdf
- Government of Pakistan (NIPS, 2016) Demographic and Health studies, National Institute of Population Studies
- Indicators, E. (2009). Technical guidelines. *UNESCO Institute for Statistics*. Retrieved October 15, 2018, from http://uis.unesco.org/sites/default/files/documents/education-indicators-technical-guidelines-en\_0.pdf
- Indicators, E. (2009). Technical guidelines. *UNESCO Institute for Statistics*, 50. Montreal. Retrieved October 15, 2018 from http://www.uis.unesco.org/ev.php?ID=5202\_201&ID2=DO\_TOPIC.
- Isani, U. A., & Virk, M. L. (2001). *Higher Education in Pakistan: A historical and futuristic perspective*. National Book Foundation.
- Lynd, D. (2007). The education System in Pakistan. *Retrieved October 15, 2018*, from http://unesco.org.pk/education/documents/publications/The%20Education%20s ystem%20in%20pakistan.pdf
- Malik, A. B. (2011). Policy analysis of education in Punjab Province. *Islamabad, Pakistan: UNESCO. Retrieved January,4*, 2017 from http://www.unesco.org.pk/education/documents/situationanalysis/Education\_Policy\_Analysis\_for\_Punjab.pdf

- Mehmood, M. (2011). The constitution of Pakistan 1973, Al-Qanoon Publishers, Lahore.
- National Education Policy. (2009). Government of Pakistan. Ministry of Education. Islamabad,
- Pakistan Education for ALL, Review Report. (2015). NEMIS/Academy of Educational Planning and Management. Government of Pakistan. Islamabad.
- Pakistan Education Statistics 2016-17 (2018). *NEMIS/Academy of Educational Planning and Management*. Government of Pakistan. Islamabad.
- Taiwo, O., (2018). *Importance of Education in our life*. Retrieved November 15, 2018 from https://greenwayfam.com/importance-of-education-in-our-life/
- The World Bank Group. (2010). School Enrolment, Primary (net %). The World Bank Data. Retrieved October 15, 2018 from http://data.worldbank.org/indicator/SE.PRM.NENR?display=default
- Thuang, N. (2008). *Development of M&E Framework*. UNESCO Institute for Statistics. Bangkok: UNESCO.
- UNESCO (2006). UNESCO 's Global Education Database. Retrieved October 16, 2018 from http://uis.unesco.org/node/334718
- UNESCO (2007). International Education Statistics, Official School Ages, Primary, Secondary and Compulsory Education.
- United Nations Educational, Scientific and Cultural Organization (UNESCO) (2000). World Education Report 2000: The Right to Education: Towards Education for all throughout life. UNESCO, Paris, France.
- United Nations Educational, Scientific and Cultural Organization (2009). *Education Indicators Technical Guidelines*. Montreal. Retrieved October 16, 2018 http://www.uis.unesco.org/ev.php?ID=5202\_201&ID2=DO\_TOPIC.

- United Nations. (2010). The Millennium Development Goals Report 2010: Statistical Annex. New York: The United Nations.
- Voyles, M. J. (2011). Student academic success as related to student age and gender. Ph.D Dissertation, University of Tennessee at Chattanooga.
- Wikigender, (2018). Retrieved October 15, 2018 https://www.wikigender.org/wiki/net-enrolment-ratio-ner/

## Academy of Educational Planning & Management Ministry of Federal Education & Professional Training Islamabad

## "Analysis of Age Specific Data of Students upto Higher Secondary School Level in Pakistan"

1. School EM	/IIS Code					L							
2. School Na	me (In Capital letters)												
3. Province/F	Region:						4. District:5. Tehsil:						
6. Union Council Name:													
8. Phone No. of School:							_ 9. Schoo	l Comple	te Address:				
10-													
10. Location	(1- Urban, 2- Rural)	]					11. Gende	r: (1- Ma	le, 2- Female, 3-M	ixed)			
12. School L	evel: (1-Primary, 2- Midd	le, 3- Hig	h, 4-l	H/Sec	ondary	()	13. Sector	: (1-Publ	c, 2-Private)	2			
14. Notified A	14. Notified Admission Age:								on Age:				
(i) Pre-Pr	imary (Kachi/Awal Adna)						(i) Pre-Primary (Kachi/Awal Adna)						
(ii) Prima	ry (Pakki/Awal Ala/Class-	·l)			-01		(ii) Pr	(ii) Primary (Pakki/Awal Ala/Class-I)					
(iii) Middl	e (Class-VI)						(iii) M	iddle (Cla	ass-VI)				
	(Class-IX)								s-IX)				
(v) H/Sec	condary (Class-XI)		_				(v) H	Seconda	ry (Class-XI)				
16. Is there	any documentary require	ment to v	erify	Date	of Birth	n at th	ne time of adr	nission?	YES N	$\circ$			
a). If YES	S, B-Form	Birth Certi	ificate	e [	Affi	idavit	t So	hool Lea	ving Certificate	Other (Specify)			
17 Total En	rolment in This Level/Stag	no.						ntal Enro	ment in School:				
	nter Date of Birth of each						10. 1	Jiai Lillo	illent in School				
	I Date of Bitti of each	Student	IIIIes	specu	ve colu	1000				T			
Student ID	Class-I		C	Class	i-II		Student ID		Class-III	Class-IV			
01							01						
02							02						
03							03						
04							04						
05							05						
06							06						
07							07						
08							08						
09							09						
10							10						
11							11						
12							12						
13							13						
14							14						
15							15						
16							16						
17							17						
18		$\top$					18						
19		$\top$					19						
20		$\top$					20						

Student ID	Class-V	Class-VI	Student ID	Class-VII	Class-VIII
01			01		
02			02		
03			03		
04			04		
05			05		
06			06		
07			07		
08			08		
09			09		
10			10		
11			11		
12			12		
13			13		
14			14		
15			15		
16			16		
17			17		
18			18		
19			19		
20			20		

Student ID	Class-IX	Class-X	Student ID	Class-XI	Class-XII
01			01		
02			02		
03			03		
04			04		
05			05		
06			06		
07			07		
08			08		
09			09		
10			10		
11			11		
12			12		
13			13		
14			14		
15			15		
16			16		
17			17		
18			18		
19			19		
20			20		