

PalArch's Journal of Archaeology of Egypt / Egyptology

IMPACT OF MEDIUM OF INSTRUCTION ON STUDENT'S ACADEMIC ACHIEVEMENT AT PRIMARY SCHOOL LEVEL OF QUETTA CITY, BALOCHISTAN

*Tehseen Anjum¹, Mahnaz Aslam², Prof. Farida Azeem Lodhi³, Sumaira Batool⁴, Shahzad
Haider⁵*

¹ Lecturer, Department of Education Mir Chakar Khan Rind University, Sibi, Balochistan,
Pakistan

² Assistant Professor, Department of Education University of Turbat, Kech, Balochistan,
Pakistan

³ Department of Education Jinnah University of Women, Karachi

⁴ Department of Education International Islamic University, Islamabad

⁵ Faculty of Education LUAWMS, Uthal

Email: tehsen.anjum@mckru.edu.pk mahnazbaloch1313@gmail.com

dr.faridaazeem@juw.edu.pk sumaira.batool@iiu.edu.pk shazibaloch17@gmail.com

Tehseen Anjum, Mahnaz Aslam, Prof. Farida Azeem Lodhi, Sumaira Batool, Shahzad Haider. Impact Of Medium of Instruction on Student's Academic Achievement at Primary School Level of Quetta City, Balochistan -- Palarch's Journal of Archaeology of Egypt/Egyptology 19(3), 117-137. ISSN 1567-214x

Keywords: Language, Mother Tongue, Academic Performance, Primary Level.

ABSTRACT

Teaching in child's first language is effective than the second or third language which improves the academic performance. The purpose of this study was to examine the effects of teaching students in their mother tongue at primary level and inspecting their achievement in academics at primary level at Quetta city.

Pre-test was conducted in 5 and 4 Grade class of the two schools of Quetta city. Same classes were observed for thirty days, 15 days in each class, two sections of five and fourth Grades was selected. The teacher was asked to deliver the lecture in mother tongue (Pashto) and Urdu respectively. Check list was used by observer to check the daily progress. After the observation period the post test was conducted in the same classes and the results were compared. The

questionnaire was filled by the teachers. Focused group interview was also conducted from the selected classes. The data was analyzed statistically using SPSS 20.

Findings show that teachers agreed that child should be instructed at primary level in their first language as it is much more effective for improving their academic performance. Concisely, research findings indicate that child was satisfied when their native language was used and so the teacher as it take less time for her to make child understand of what s/he was teaching.

INTRODUCTION

In Pakistani society where various systems of educations are followed, medium of instruction is the crutch issue. The national language of Pakistan is Urdu and it is a symbol of national unity. It also works as lingua Franca, while English is used as an official language. But there are several languages in Pakistan, the major native as well regional languages which are; Pashto (in Khyber-Pukhtoonkhawa), Punjabi (in Punjab), Balochi (in Balochistan), Sindhi (in Sindh), Saraiki and Kashmiri (Regional Language) and some minor languages like Shia, Potwari, Khowar, Shina, Kalash, Wakhi, Bengali, Burushaski, Barhvi, Khowar, Balti, Hindko, Farsi etc.

The International Journal of Social Sciences and Education states that Pakistan has a rich heritage in Asia, but the difficulty arises when it comes to deciding on what would be the medium of instruction at schools. Every educational system uses a different medium for instructional purpose, so it gives birth to a dilemma of dissimilar and a discrete social setup. So the national integrity and uniformity are highly distressed and diminished (Ahmed, 2011).

In the Journal of research humanities it is articulated that, in the education system of Pakistan, where the pupils belong to the multilingual backgrounds, it's difficult for them to attain the primary and secondary education in second or third language. The grasping of the basic concepts is difficult for the pupil in secondary or tertiary language, which slows down their processing speed of grasping things, instead of comprehending them in their native language (Raja, 2010).

Policy For Medium of Instruction in Pakistan in Different Setups of Government

For the personal development, the economic prosperity of the nation and ideological promotion of the country education is the key factor. After independence, Pakistan is facing the problem of a medium of instruction. Since 1947, every government has formulated the policy documents in this regard. During the First Educational Conference, 1947, it was suggested that instruction should be provided in the provincial language. The main purpose of the policy was to introduce Urdu as lingua franca and it would be obligatory in institutions (Ahmed, 2011). In Ayub Khan Regime 1958, a lawful and societal change in the policies was introduced for the modernization and progress, argued by Ansari (2011). Sheriff's commission policy calls for the establishment of the English medium schools in order to raise educational quality, but Ahmed (2011) in his report states that there wasn't any execution of the policy. In the era from

1956 till 1972, there is no such policy to adopt the mother tongue or provincial language as a medium of instruction at primary level.

In 1973, a new constitution was introduced; there were some language provisions such as:

- 1) Urdu would be used as the state language and similarly as official linguistic.
- 2) Second official language will be English until it replaces Urdu.
- 3) Provincial languages can be used by teachers for the instructional purpose without any prejudice.

Still, Urdu has not yet been announced as an official language after 40 years. (Jan, 2013)

The Medium of Instruction is the most important issue in the education sector, by keeping it in mind that Pakistan is a multilingual country and only 7% people are Urdu speaking (their native language). The reform in the form of Medium of Instruction in the Mother Tongue is promoted by United Nations Educational, Scientific and Cultural Organization (UNESCO) and British Council. The instruction in Mother Tongue is easily comprehended by the child rather than second or third language. The expression of the ideas got way if the education at an early stage is provided in the Mother Tongue.

Objectives

1. To find the effectiveness of mother tongue as the medium of instruction at primary level.
2. To determine the level of satisfaction of learners with mother tongues as the medium of instruction.

Research Questions

The study was an attempted to deliver answers to research questions namely:

1. Whether the mother tongue base medium of instructions has significant effects on students' achievement?
2. With which language as a medium of instruction the students are more satisfied?

METHODOLOGY

Methodology for the study was as follows

Research Design

The basic objective of this study was to analyze the impact of mother tongue as medium of instruction on students' academic achievement at primary level. This research design was descriptive cross sectional in nature. The information collected through the tools was coded and analyzed through SPSSv20.

Study Setting

This study was done in different government schools in Quetta city of Pakistan. These include;

- Government Girls High School Railway Colony, Quetta city
- Government Islamia Girls High School, Quetta.

Study Duration

Duration of study was from March 2021 to December 2021.

Population

- All Government and elementary Schools involved girl student of Quetta city were incorporated as populace.
- All the female educators at Primary level in Government schools of Quetta city were chosen as the number of respondents in this study.
- All the understudies enlisted in Grade 4 and 5 of Government Schools were considered as populace of this study.

Sample and Sampling Technique

For this investigation, three staged examining method was utilized. First stages were drawn based on convenience sampling approach in which only two Government schools of Quetta city were taken to collect the essential data. In the another phase, to each school two elementary classes were selected on the basis of their availability and agreement for observation and to conduct focused group interview. In the third phase, from every school forty teachers were selected on the basis of convenient sampling, who agreed to fill the questionnaire.

Research Instruments

The research instruments for the study were as under:

- An observational tool (check list) has been developed by the researcher to check the level of satisfaction of the students with Urdu and mother tongue.
- Structured interview has been developed in order to know the views of the students about the use of mother tongue as medium of instruction at primary level.
- Questionnaire has been developed for the teachers in order to know the views of teachers about the use of mother tongue at primary level.
- A pre and posttest, prepared by the class teacher, has been conducted at the start and end of the observational period.

Data Analysis

The data was collected and then analyzed statistically that includes:

- Comparison of means of students pre and posttest using chi-square
- Description to analyze the focused group interview of the students
- Description of the teachers questionnaire
- Checklist was analyzed using chi-square

Language Acquisition in Childhood

There are two approaches for understanding the language acquisition one is a behaviorist and other is nativist. Behaviorist believed that the child's caregivers and the members of the child's circle reinforce the child to learn and produce the properties of the language such as images, sounds, words etc. (Skinner, 1957). The believers of the behaviorist approach believed that the child early years are important for speedy language learning and acquiring the meaning of the terms. On the contrary the supporters of the nativist argued that language grasping is the inborn capability of the child (Chomsky 1965, 1975). The child is internally guided to learn language. Hart & Todd,)1995 (articulated that the child learning of the language is affected by his exposure to the language .Recently, many coeval theories have been applied by the developmental psychologist to explain how a child gets the language and understand his language. Language is a human ability, organic capacity and is an innate perspective which is based on the language environment, especially in two distinct languages (Ball, 2011).

The Language in Educational Context

There are three languages spoken in Pakistan Since independence, Urdu; official language: English and one language recognized for each province (Mahboob, 2003). British council report (2011) has some finding regarding the language percentage in Pakistan. The results are - Language breakdown of Pakistanis by mother-tongue are: (Punjabi) 49.3 %, Pashto 12.0 %, Sindhi 11.7%, Urdu 6.8%, Balochi 3.6%, Brahvi 1.3 % and Farsi 0.6 %.

Table 1: Spoken languages in Pakistan

No	Language name	Speakers (Million)	Percentage of population
1	Panjabi, Western	60.0	38.3
2	Sindhi	18.5	11.7
3	Sirakai	13.8	8.7
4	Urdu	10.7	6.8
5	Pashto, Northern	9.6	6.1
6	Pashto, Central	7.9	5.0
7	Balochi, Southern	2.8	1.8
8	Brahvi	2.0	1.3

9	Hindko, Northern	1.9	1.2
10	Balochi, Eastern	1.8	1.1
11	Pashto, Southern	1.4	0.9
12	Balochi, Western	1.1	0.7
13	Farsi Eastern	1.0	0.6
14	Panjabi, Mirpur	1.0	0.6
	Sub-total	134.1	84.8
	Minor languages (58)	24.0	15.5
	Total	158.1	100.00

Source: Coleman Report, 2010

Some of the language in Table such as ‘Northern Hindko’ and ‘Central Pashto’ are familiar to the speaker only and there is sub division in the dialectal languages also. It has been said that at every 20 km the native language changes to some extent.

The British colonial era proposed Urdu for masses and English for the elite class, as a medium of instruction. But it was criticized by the people (e.g. Muslim and Hindu Panjabi) due to their socio-lingual background. So these groups lost their literary sources (Andrabi, Das, Khawaja, Vishwanath, & Zajonc, 2007).

Since independence Pakistan is developing policies for language but there is no proper implementation of these policies. The upshot of this is that Urdu and English remained in the lingual. It has been argued that in Pakistan Urdu and English policy contributes to the cultural anomie. One of the interviewer said that Pakistani don’t know who they are? So Urdu is used in government schools and English in private schools. Out of the 72 languages only Pashto in Khyber pakhtoonkhwa KPK and Sindh. Sindhi has recognized as official language for medium of instruction at primary level with English from 1st year of schooling (Coleman, 2010).

ANALYSIS OF DATA

Results for Research question no#1

The first research question deals with the effectiveness of the mother tongue on the academic achievement of the child at primary level. The pretest and posttest was made by their subject teacher. The subject chosen was Science. There were two groups of the third Grade and fourth Grade. The results of the both were compared. Following are the results.

Table 2: Paired-Samples T-Test to Assess Pretest and Posttest Correlation and Significance among Class 5

Variables	N	Mean SD	SD Error Mean	df	t	P value
<i>Pre-Test</i>	64	3.98 ± 2.567	0.321	63	-1.785	0.079
<i>Post-Test</i>	64	4.45 ± 2.834	0.354			

Correlation =0.702 (p=0.001)

Paired-Samples T-Test to Assess Pretest and Posttest Correlation and Significance among Class 5

T-Test (paired-samples t-test) was performed to compare the means between two related groups on the same continuous, dependent variable that is pre-test and post-test. The test initially showed mean of pretest 3.98 and posttest 4.45 that shows improvement in post-tests of respondents with positive correlation of 0.72 which is statistically significant.

The test was further evaluated to -1.785(63), p =0.079. Due to the means of the two groups i.e. pre-test and post-test and the direction of the t-value, we can conclude that there was a statistically significant improvement in learning and will lead to improved academic performance following the training program from 3.98 ± 2.56 to 4.45 ± 2.83, an improvement of test scores as shown in table. 4.1.

Table 3: Paired-Samples T-Test to Assess Pretest and Posttest Correlation and Significance among Class 4

Variables	N	Mean SD	SD Error Mean	df	t	P value
<i>Pre-Test</i>	64	7.77±5.029	0.629	63	-3.458	0.001
<i>Post-Test</i>	64	8.86±5.203	0.650			

Correlation =0.878 (p=0.001)

Table No. 3: Paired-Samples T-Test to Assess Pretest and Posttest Correlation and Significance among Class 4:

T-Test (paired-samples t-test) was performed to compare the means between two related groups pre-test and post-test of Grade 4 on the same continuous, dependent variable. The test initially showed mean of pretest 7.77 and posttest 8.86 that shows improvement in post-tests of respondents with positive correlation of 0.87 which is statistically significant.

The test was further evaluated to $-3.458(63)$, $p = 0.001$. Due to the means of the two groups i.e. pre-test and post-test and the direction of the t-value, we can conclude that there was a statistically significant improvement in academic achievement, following the training program from $7.77 + 5.029$ to $8.86 + 5.203$, an improvement of test scores as shown in table 4.2.

Results for Research question no#2:

In order to check the level of satisfaction of the learner with the medium of instruction as Pashto or Urdu a checklist was developed and the both third and fourth Grade had been observed for thirty days. The results are as following.

Class 5 (Urdu Pashtu) – RESULTS

Table 4: Demographic or language description

Variables/Assessing Parameters		Frequency	Percentage	Remarks
Level/class	5 th Grade	30	100.0	Class. 5 was selected for observation.
Observational tool (Check List)	Urdu	15	50.0	Pashto and urdu checklist were used for 5 Grade as observation tool.
	Pashtu	15	50.0	
Class Strength	30-34	10	33	The classroom strength lies between 30 to 44
	35-39	12	.3	
	40-44	8	40.0 26.7	
Teacher language (home language)	Pashtu	30	100.0	The native language of teacher was Pashto.
Student language	Pashtu	30	100.0	The native language of students were Pashto.
Instructional language	Urdu	15	50.0	The teacher used Pashto and urdu in classroom alternatively.
	Pashtu	15	50.0	
Subject	Science	30	100.0	Science subject was selected for observation.
Duration	30 Minutes	30	100.0	Observation period consist of 30 minutes.
Institution	Govt Girls High School Nasirabad	15	50.0	Two institutions were selected from Quetta city.
	Quetta	15	50.0	

	Govt Girls Middle School Quetta City			
--	--------------------------------------	--	--	--

Demographics

Table no.4 showed demographic characteristics. A total of 30 respondents were recruited. Of these respondent's equal checklist 15 (50.0%) was assessed. Fifteen (50.0%) were from 5th Grade and 15 (50.0%) were from 4th Grade. The maximum of class strength 11 (36.7%) were ranges in between 40-44. Equal groups of teacher's languages (Urdu 15 (50.0%) and Pashtu 15 (50.0%)) were observed. All students 30 (100.0%) had Pashtu language. Instructional language was given to all 30 (100.0%) respondents in Urdu in science subject with the duration of 30 minutes. The institution for this assessment was Govt Girls High School Quetta City and Govt Girls High School Nasirabad.

Table 1: Satisfaction levels of Grade 5

Satisfaction	Frequency N=30	Percentage %
Adequate Satisfaction	13	43.3
Poor Satisfaction	17	56.7

Scoring Description of Patients' Satisfaction

Satisfaction score calculated by using conversion factor. There are 15 questions, each response was assigned marks or values as; agree was given 3 marks, neutral was given 2 marks and disagree was given 1 marks. As there were 15 questions so minimum score was 15 and highest was 45, cut off level was taken as 30 which means respondent score equal and more than 30 was considered as Adequate Satisfaction and less than 30 was considered as poor satisfaction.

The result showed that maximum respondents 17 (56.7%) had poor or low satisfaction with Urdu as medium of instruction.

Table 2: Comparison of Means satisfaction scores of Urdu as Institutional Language

Variables		Frequency	Mean	SD	P Value
Grade*	3 rd Grade	30	28.63	3.95	
Checklist	Urdu	15	32.133	1.92	0.001
	Pashtu	15	25.133	1.55	
Class Strength**	30-34	10	29.100	4.20	0.851
	35-39	12	28.250	3.76	
	40-44	8	28.625	4.37	
Teacher language*	Pashtu	30	28.63	3.95	

Student language*	Pashtu	30	28.63	3.95	
Instructional language*	Urdu	15	32.133	1.92	0.001
	Pashtu	15	26.133	1.55	
Subject*	Science	30	28.63	3.95	
Duration*	30 Minutes	30	28.63	3.95	
Institution *	Govt Girls High School Nasirabad Quetta	15	32.133	1.92	0.001
	Govt Girls Middle School Quetta City	15	25.133	1.55	

Sig <0.05

* Mann-Whitney U Test

** Kruskal Wallis Test

Comparison Of Mean Scores with Demographics

Comparison of mean satisfaction scores of Urdu were computed as dependent variable and individual demographics characteristics were taken as independent variable and mean comparison is calculated and determining of p-value have been done which shows that the p-values are exceeding than 0.05 that show no significance over study particularly there is no statistical significant difference in the study variables of Grade, Class strength, teacher language, student language, instructional language, subject, duration and institute (P>0.05) as shown in table 4.6.

Table 3: Cross tabulation and significant association among dependent and independent variables

Variables		Satisfaction		P Value
		N=30		
		Adequate	Poor (Low)	
Level/Class*	3rd Grade	13	17	-----
Observational tool (Checklist)	Pashtu	0	15	0.001
	Urdu	13	2	
Class Strength**	30-34	5	5	0.665
	35-39	4	8	
	40-44	4	4	
Teacher language*	Pashtu	13	17	----
Student language*	Pashtu	13	17	----

Instructional language*	Urdu	13	2	0.001
	Pashtu	0	15	
Subject*	Science	13	17	----
Duration*	30 Minutes	6	24	----
Institution *	Govt Girls High School Nasirabad Quetta	13	0	0.001
	Govt Girls Middle School Quetta City	2	15	

Chi Square Test and Cross-Tabulation Among Satisfaction Groups

Among categorical data of respondent's satisfaction, which was dichotomized as adequate and poor (low) satisfaction further tested on basis of chi-square test as shown in table 4.7. The categorical data were compared and tested which showed that p-value p-values which exceeding than 0.05 that show no significance over study particularly there is no statistical significant difference in the class strength (P>0.05). Only Instructional language and institution have significant association among study variables (P=0.01).

Class 4 (Urdu Pashtu) – RESULTS

Table 4: Demographic or language description

Variables/ parameters	Assessing	Frequency	Percentage	Remarks
Level/Class	4th Grade	30	100.0	Class 4 was selected for observation.
Observational tool (Check List)	Urdu	15	50.0	Pashto and urdu checklist were used for 3 Grade as observation tool.
	Pashtu	15	50.0	
Class Strength	30-34	2	6.7	The classroom strength lies in between 30 to 49.
	35-39	4	13.3	
	40-44	13	43.3	
	45-49	11	36.7	
Teacher language	Pashtu	30	100	The native language of teacher was Pashto.
Student language	Pashtu	30	100.0	The native language of students were Pashto.
Instructional language	Urdu	15	50.0	The teacher used Pashto and urdu in
	Pashtu	15	50.0	

				classroom alternatively.
Subject	Science	30	100.0	Science subject was selected for observation.
Duration	30 Minutes	30	100.0	Observation period consist of 30 minutes.
Institution	Govt Girls High School Nasirabad Quetta	15	50.0	Two institutions were selected from Quetta city.
	Govt Girls Middle School Quetta City	15	50.0	

Demographics

Table no.4.8 showed demographic characteristics. A total of 30 respondents were recruited from 4th Grade. The maximum of class strength 13 (43.3%) were ranges in between 40-44. All the teachers (100.0%) has Pashto as native language. All students 30 (100.0%) had Pashtu language. Instructional language was given in Urdu and Pashtu to equal proportions 15 (50.0%) among respondents in science subject with the duration of 30 minutes. The institution for this assessment were done in Govt Girls High School Nasirabad Quetta and Govt Girls Middle School Quetta City.

Table 9: Satisfaction levels of Grade 4

Satisfaction	Frequency N=30	Percentage %
Adequate Satisfaction	14	46.7
Poor Satisfaction	16	53.3

Scoring Description of Patients' Satisfaction

Satisfaction score calculated by using conversion factor. There are 15 questions, each response was assigned marks or values as; agree was given 3 marks, neutral was given 2 marks and disagree was given 1 marks. As there were 15 questions so minimum score was 15 and highest was 45, cut off level was taken as 30 which means respondent score equal and more than 30 was considered as Adequate Satisfaction and less than 30 was considered as poor satisfaction.

The result showed that maximum respondents 16 (53.3%) had poor or low satisfaction.

Table 10: Comparison of Means satisfaction scores of Urdu as Instructional Language

Variables		Frequency	Percentage
Class	4th Class	30	100.0
Check List	Urdu	15	50.0
	Pashtu	15	50.0
Class Strength	30-34	2	6.7
	35-39	4	13.3
	40-44	13	43.3
	45-49	11	36.7
Teacher language	Pashtu	15	50.0
	Urdu	15	50.0
Student language	Pashtu	30	100.0
Instructional language	Urdu	15	50.0
	Pashtu	15	50.0
Subject	Science	30	100.0
Duration	30 Minutes	30	100.0
Institution	Govt Girls High School Nasirabad Quetta	15	50.0
	Govt Girls Middle School Quetta City	15	50.0

Sig <0.05

* *Mann-Whitney U Test*

** *Kruskal Wallis Test*

Comparison Of Mean Scores with Demographics

Comparison of mean satisfaction scores of Grade 4 were computed as dependent variable and individual demographics characteristics were taken as independent variable and mean comparison is calculated and determining of p-value have been done which shows that the p-values are exceeding than 0.05 that show no significance over study particularly there is no statistical significant difference in the study variables of Grade, Class strength, student language,, subject and duration ($P > 0.05$) while check list, teacher language, instructional language and institution has significant association among study variables ($p < 0.05$) as shown in table 4.11.

Table 11: Cross tabulation and significant association among dependent and independent variables

Variables		Satisfaction N=30		P Value
		Adequate	Poor (Low)	
Level/Class*	4 th Grade	14	16	-----
Class Strength**	30-34	1	1	0.792
	35-39	1	3	
	40-44	7	6	
	45-49	5	6	
Teacher language*	Pashtu	0	1	0.001
	Urdu	14	15	
Student language*	Pashtu	14	16	----
Instructional language*	Urdu	14	0	0.001
	Pashtu	1	15	
Subject*	Science	14	16	----
Duration*	30 Minutes	14	16	----
Institution *	Govt Girls High School Nasirabad Quetta	14	1	0.001
	Govt Girls Middle School Quetta City	0	15	

Chi Square Test and Cross-Tabulation Among Satisfaction Groups

Among categorical data of respondent's satisfaction, which was dichotomized as adequate and poor (low) satisfaction further tested on basis of chi-square test as shown in table 4.12. The categorical data were compared and tested which showed that p-value p-values which exceeding than 0.05 that show no significance over study particularly there is no statistical significant difference in the class strength (P>0.05). Teacher language, Instructional language and institution have significant association among study variables (P=0.01).

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The basic objective of this study was to analyze *the impact of medium of instruction on student's academic achievement at primary school level of Quetta city, Balochistan*. Questionnaires for the teachers, focused grouped interview for the students and a teacher made test were used to collect the required data. Therefore, this research was designed on the basis of mix methods. The information collected through the tools was coded and analyzed through SPSS20. Mainly correlation between the variables of the study was used to conclude the results.

This investigation was mainly started through brief literature review. Through literature review the background of the mother tongue education system was reviewed and especially in Balochistan scenario. In the light of literature the instruments were designed and tested by experts. So the medium of instruction was the independent variable whereas the academic achievement was the dependent variable.

FINDINGS

The study research question number one aimed at finding out the effectiveness of mother tongue on academic achievement at primary level in Quetta city. Following are the study findings:

1. There was direct relationship between using mother tongue as a medium of instruction and student academic achievement. As the medium of instruction was changed to Urdu the marks of the students decreased and as medium of instruction was changed to mother tongue (Pashto) the marks of students increased. A research conducted by Ereson, Olanipekun, Sunday, Deborah, & Andokari (2014), showed that there is no relationship between the mother tongue (Yoruba language) and students' performance in English language among secondary schools. The tendency of improving or hindering students' performance has no connection with their mother tongue (Yoruba language). On the contrary there are studies showed that the mother tongue and students' academic performance have positive correlation. The study of the Aladejana and Odejobi (1999) revealed that by using mother tongue at early age of education can improve and enhance the learning of the primary student. Hence they both have positive correlation.
2. Mother tongue is best to be used at primary level. The results have been seen in the research work of Cole (1998) who claims that first language is the best language to be used in the beginning of education and for lower level of education. The level of understanding of the new terms were high then before.
3. The students actively participated in all the class activities and were highly motivated towards learning. The study conducted by Assefa, (2002) which shows that those students who had positive attitude towards mother tongue (Sidama language) as medium of instruction were motivated to learn in Sidama language.
4. Students spent less time on learning new concepts and require less time for grasping the difficult words. Their proficiency increased by the use of mother tongue as instructional medium. Similar results were found in the study of Oribbor & Adesina, (2013) which shows the fact that the children acquire facts and information easily and quickly interpret information, obtained properly and correctly, acquire practical and manipulative skills easily and develop desirable attitudes towards people when their mother tongue was used for instructional purpose.
5. Students don't need assistance for learning new terms again and again. They learn things and terms at once when taught in their first language. Paker & Karaağaç, (2015) in their research study showed that the instructor sometimes uses first language for the explanation of the meaning of the new terms and words. Thus it helps the students to have better understating of the terms and they catches the terms at once. Zergani, (2016) articulated in his research findings that participants appreciated the use of mother tongue for instructional

purpose as it helps in translating terms, clarifying unknown concepts and levitatin their understanding. They know whats haappning in the class and what really the lecture is about. Khejeri, (2014) study showed the results that teachers saw the first language make students able to participae in the lecture and tmake it easier for students to grasp difficult words.

6. There was no communication gap between students and teacher for communication. The use of same language made it easy for them to convey their message to their teacher. The teacher could develop better relationships with their students by having close contact with them using their mother tongue. They can easily understand what student wanted to say. The same finding have been seen in the research work of Paker & Karaağaç, (2015) which states that using mother tongue in the classroom, the students' help each other in studies first language should be used to tell about the rules, for taking attendance and giving administrative information. They could talk about their problems easily and can communicate in the classroom for discussing various topics. Khejeri, (2014) from his findings of the study, it was revealed that teachers recognized that mother tongue helps to create a close relationship with learners. It enable the learner to express their problems and easily communicate with the teacher regarding their problems. It provides the learners the home environment in schools and soothe their discomfort with the changed and new environment. Práce (2010), revealed in his study findings that the teacher recur native language to communicate with learners who don't understand them. His said that the learners don't understand fast when a foreign language is used to communicate with them in their first years of schools, but keeping in mind that it's a gradual process to adopt not to rush applying it.

7. The students' were more comfortable with their mother tongue when used in the classroom. Similarity with the results can be found with the Paker & Karaağaç, (2015) study results. They claimed that they felt more comfortable with their first language about some functions or topics rather than in English. The students know the significance of their mother tongue in classroom instruction and they strongly believed that their first language is better to comprehend terms, learn new things and negotiation of their problems.

8. Students' level of interest was high and were enjoying the instructional procedure. They were more prepared for instruction. Villaneza, (2016) and Zergani, (2016) have reported the findings that the use of mother tongue has surprising effects on teaching and learning procedure. It was helpful in gaining the students' attention. The level of understanding was high and they were infact enjoying the instruction in their mother tongue. Their response to the questions were also surprising. They feel less lost durin the instruction.

9. They were satisfied with their native language instructional method. Their confidence level was high and were actively participating in classroom. Villaneza, (2016) the more active participation of the children were seen when their first language was used for instructional purpose. Their confidence level was raised and they were answering the asked questions. They were making less mistakes while giving the answers. The children were conceiving and explaining the content, expressing himself as the use of mother tongue was there. The comparing the study results with the findings of Zergani, (2016) which shows that students prefer the use of mother tongue for instructional purpose as it aids in levitating their confidence level.

10. Mother tongue as instructional medium helps in expressing themselves easily. They convey their message easily without any hesitation. Alvarez, (2004) the data of his study revealed that the first language plays an important role in increasing the confidence of the child and it shows that the first language has greater impact on the self-expression of the child. First language helps the child to overcome his nervousness and be more expressive.

CONCLUSION

When reconsidering the purpose of the present study, the goal was to attain a deeper understanding of the mother tongue as instructional medium and to assess its effectiveness across the academic achievement of the students at primary level. The study was descriptive cross sectional using mix methodology (both qualitative and quantitative methods) to examine the effectiveness of mother tongue as instructional medium with the assistance of a statistical analysis for each of the instrument. A major finding was that, the mother tongue based instruction method had a positive effect on the academic achievement of the student. In order to determine if the medium of instruction is conducive to learning, it was necessary to examine the different areas that have the most impact on student performance. Numerous studies indicate the effects of mother tongue as instructional medium, whether negative or positive for the instructional purpose.

There is a lack of research and focus in this regard as Pakistan is the multi lingual country where one native language cannot be used for primary schooling of students. There are numerous of the languages used all over the country and even if we look for the Balochistan case it can be seen that there are three major languages Pashto, Balochi Brahvi, and in the Quetta district there is multilingualism is practiced because of the mixture of all these languages is found. So the major dilemma is which language to choose and how to implement the policy. Books are in developing stages and some of the books have been developed in the native languages but the matter is how, when and where to implement these books. The lack of training is another dilemma. Experts, teachers and parents are in favor of implementing the policy of the mother tongue based education system and this study also showed that the academics are being improved by teaching child in their native language.

The study revealed that the mother tongue based education system had significant effects on the academic achievement of the students at primary level and their understating level had also been improved in the rural setting. The present study helped in gaining an initial understanding of mother tongue as instructional medium and its outcomes on students' performance, who were being instructed in their mother tongue instead of the national language. Making generalized statements about appropriateness of mother tongue based education system and successful delivery formats, amongst other factors, is simply not within the scope of this study. Student and teacher surveys were conducted to gain a deeper understanding of the perceptions from the students and teachers in regards to the mother tongue based education model. Further research is needed to answer the multitude of questions that this primary study has suggested for future exploration.

REFERENCES

- (2004). *Literacy and Education*. Quetta: MICS.
- (2006). *The System of Education in Pakistan*. Nordic Recognition Information Centres.
- (2008). *Summary of Need Assessment Report on Literacy Initiative For Empowerment (LIFE) Pakistan*. Government of Pakistan, Project Wing, Ministry of Education. Islamabad: UNESCO .
- (2011). *District Developmet Profile: Quetta*. Quetta: Planning & Development department, Balochistan.
- (2011). *Education for All Plan Balochistan (2011-2015)*. UCHD & UNESCO, Education. Quetta: Government of Balochistan.
- (2011, August 17). WASHINGTON DIARY: FATA: Pakistan's 'wild west'? . (D. M. Ejaz, Interviewer) Wichar: A comprehensive Punjabi Journal.
- (2013). *Asian Development report*. Asian Bank.
- Abbas, S. (1993). The power of English in Pakistan. (B. B. Kachru, & L. E. Smith, Eds.) *World Englishes: Journal of English as an International and Intranational Language*, 2(2), 147-196.
- Abedi, J., & Lord, C. (2000). The Language Factor in Mathematics. *Applied Measurement in Education*, 14(3), 219-234.
- Ashraaf, M. (2014). *The virtual Jirga: the 2009 education policy and the medium of instruction debate in Pakistan: who is participating and what are the implications for Balochistan?* College of Social Sciences , School of Education. University of Glasgow .
- Ashraf, N. (n.d.). *The Islamization of Pakistan's Educational System: 1979-1989*. Washigton DC: Middle East Institut. 41(4), 241-247.
- Balochistan, G. o. (2011). *Provincial Early Childhood Education (ECE) Plan*. Islambad: UNESCO funded.
- Balochistan, G. o. (2011). *Education for All Plan: Balochistan 2011-2015*. Islamabad .
- Balochistan, G. o. (n.d.). *Google*. Retrieved 2016, from SchoolingLog: <http://www.schoolinglog.com/Educational-Organizations-Groups-In-Pakistan/Government-Of-Balochistan/>
- Bamgbose, A. (1977). *Introduction to Language Education in Nigeria*. Lagos: National Langaue Centre.
- Bari, F. (2013, june 21). In Which Medium? Lahore, Punjab, Pakistan: The Dawn Newspaper.
- Bengali, K. (1999). *History of Educational Policy Making and Planning in Pakistan* . Islamabad: Sustainable Development Policy Institute (SDPI).
- Blake, T. (2004). Exploring the Language of Schooling. *Journal of Education*, 14(1).
- Bloch, G. (2009). *The toxic mix : what's wrong with South Africa's schools and how to fix it* (1 ed.). Cape town:Tafelberg.
- Blood, P. R. (1994). *Pakistan: A Country Study* (6 ed.). Washiigton DC, U.S.A: Library of Congress.
- Bunyi, G. (1995). Rethinking the Place of African Indigenous Languages in African Education. *International Journal of Educational*, 19(4-5), 337-350.

- Buscha, B. (2010). School Language Profiles: Valorizing Linguistic Resources in Heteroglossic Situations in South Africa. *Language and Education*, 24(4), 283- 294.
- Butt, R. (1996). *Failures in the Achievements of Targets in Five Year Plans with Preferences to Secondary Education in Pakistan*. Islamabad: AIOU.
- Channa, K. H., Memon, D. S., & Memon, D. A. (2016). Medium of Instruction and Bilingualism Education: A Study of Challenges and Opportunities. *Grassroots*, Vol.50, No.1, 50(I), 261-269.
- Chomsky, N. (1965). *Aspects of the theory of Syntax*. Cambridge: MIT Press.
- Chomsky, N. (1975). Reflections on Language. In A. Kasher, *Pragmatics: Critical concept* (Vol. V, pp. 21-33). New York: Pantheon Books.
- Cleghorn, A., & Evans, R. (2014). Parental perceptions: A case study of school choice amidst language waves. *South African Journal of Education*, 34(2), 19.
- Hasan, J. (2007). *Education in Pakistan: A White Paper*. Ministry of Education, Govt of Pakistan, Islamabad.
- Haya, L. D. (1987). *The Crisis of Education in Pakistan*. Lahore: Vanguard Books Ltd. 20.
- Historical Background of Education in Pakistan. (n.d.). *Educational Article*.
- Hoodbhoy, P. (2016). *Education Reform In Pakistan: Challenges and Prospects*.
- Hornberger, N. H. (2007). Language Policy and Political issue in Education. (S. S. Media, Ed.) *Encyclopedia of Language and Education*, 2.
- Kachru, B. B. (1986, July). The Power and Politics of English. *World Englishes*, 5(2-3), 113-280.
- Khalique, H. (2003). Pakistan: The Question of Identity. *Understanding Pakistan*, 2, 1-165.
- Khan, A. (2003). Baloch Ethnic Nationalism in Pakistan: From Guerrilla War to Nowhere? *Asian Ethnicity*, 4(2), 281-293.
- Khan, A. H. (1997, Dec). Education in pakistan: fifty years of neglect.
- Khan, A. S. (2011, Nov 28). *Policy Analysis of Education in Balochistan. Islamabad: UNESCO [online]*. Islamabad: Pakistan: UNESCO.
- Khan, N. (2002, June 17). *Google*. Retrieved october 25, 2016, from <http://www.yespakistan.com/>:
<http://www.yespakistan.com/education/educationinpakistan.asp>
- Khan, S. B. (2010). Problems in Universalization of primary education in Pakistan. *Pakistan Journal of Commerce and Social Science*, 4(2), 147-155.
- Khejri, M. (2014). Teachers' Attitudes towards the Use of Mother Tongue as a Language of Instruction. *International Journal of Humanities and Social Science*, 75-85.
- Khurran, A. (2009). Hegemony, discrimination and inequality in language in education policy of Pakistan. *SPELT Journal*, 2-10.
- Komatsu, T. (2008). Qualitative inquiry into local education administration in Pakistan. *International Journal of Educational Development*, 29, 219–226.
- Mahboob, A. (2003). English Medium instruction in higher education in pakistan. *policies, perception, problems and possibilities*, 1-23.

- Mahboob, A., & Jain, R. (2016). Bilingual education in Pakistan and India. In O. Garcia, & A. Lin, *Handbook of Bilingual and Multilingual Education* (pp. 1-14). Cham, New York: Springer International Publishing.
- Mahmoob, A. (2002). *The Future of English in Pakistan. Islambad.*
- Mahmood, A., & Akram, M. (2007, May 5). The Need of Communicative Approach (in ELT) in Teacher Training Programmes in Pakistan. *Language in India* , pp. 172-178.
- Mallikarjun, B. (2004, April 4). Indian Multilingualism, Language Policy and the Digital Divide. *4*(4).
- Mandokhail, S. Z. (2010). *Medium of instruction: a suggestion.* Quetta: DAWN
- Mansoor, S. (1993). *Punjabi, Urdu, English in Pakistan: A sociolinguistic study.* Lahore: Vanguard. .
- Paker, T., & Karaağaç, Ö. (2015). The Use and Functions of Mother Tongue in EFL Classes. *Procedia - Social and Behavioral Science*, 111-119.
- Pakistan. (2009). *National Educational Policy.* Islamabad: UNESCO.
- Project Wing, M. o. (n.d.). *THE DEVELOPMENT AND STATE OF THE ART OF ADULT LEARNING AND EDUCATION (ALE).* National Report of Pakistan.
- Qadir, S. A., & Gulzar, M. A. (2010, Dec). Issues of Language(s) Choice and Use: A Pakistani Perspective. *Pakistan Journal of Social Sciences (PJSS)*, 30(2), 413-424.
- Qasim, A., & Qasim, Z. (2013). The Role of language in Education: An Analytical Review of Pakistan's Education Policy 2009. *Journal of Education and Practice*, 4(5), 159-164.
- Rahman, T. (2002). Government Policies and the Politics of the Teaching of Urdu in Pakistan. *Annual of Urdu studies*, 7, 95- 124.
- Rahman, T. (2006). *Language policy, multilingualism and language vitality in Pakistan.* Islambad: Quaid-i-Azam University.
- Rashid, A., & Shaheed, F. (1993). *Pakistan: Ethno-politics and Contending Elites.* United Nations Research Institute for Social Development (UNRISD).
- Rasool, G. (2007). *Evaluation of Educational Policies.* Masters Thesis.
- Rehman, T. A., Bilal, H. A., Abbas, N., & Mahmood, A. (2013). Functions of Code Switching in Bilingual Classroom. *Research on Humanities and Social Sciences*, 3(14), 29-34.
- Robinson, C. (2015). *Languages in adult literacy:policies and practices during the 15 years of EFA (2000-2015).* UNESCO.
- Roofi, Y., & Muhammad, A. (2011). Renaming of NWFP and Hazara Ethnicity: A New Course of Ethnic Conflict in Pakistan. *European Journal of Social Sciences*, 19(4), 588-593.
- Sabir, D. R., & Razzaq, W. (2010). MULTICULTURALISM: A CASE STUDY OF BALOCHISTAN. (N. Ullah, Ed.) *Balochistan Review*, 23(2), 17-26.
- Sayani, M. F. (2008). *Pakistan's Existing Education System.* Blog.
- Shackle, C. (1970). Punjabi in Lahore. *Modern Asian Studie.* 4(3), 239-267.
- Shahid, P. (1985). *Implementation of National Education Policy, Academy of Educational Planning and Management.* Islamabad: Ministry of Education .

- Siddiqui, D. S. (19 July, 2010). *Language Policy*. Lahore School of Economics, Centre for Humanities and Social Sciences . Lahore: DAWN newspaper.
- Skinner, B. (1957). *Verbal Behavior*. London, U.K: Oxford University Press.
- Sodhar , Z., Rasool, S., & Nissa, K. U. (n.d.). Madarsa System of Education in Pakistan: Challenges and Issues. *International Research Journal of Arts & Humanities*, 41, 291-304.
- Sodhar, Z., Rasool, S., & Nissa, k. (2013). MADARSA SYSTEM OF EDUCATION IN PAKISTAN: CHALLENGES AND ISSUES. *International Research Journal of Arts & Humanities (IRJAH)*, 41(41).
- Svendsen, E. (2014). *The influences of Code-switching in the Second Language Classroom in connection to language development*. Malmö: Malmö University.
- Syed, J. H. (2008, January). Balochistan: The Land and the People. *International Journal of South Asian Studies*, 23(1).
- Tarhan, S. (2003). *Perceptions of Students, Teachers, and Parents Regarding English-Medium Instruction at Secondary Education*. Middle East Technical University, School of Social Science . Lahore: University of the Punjab.
- Theresa, M., & Valerio, B. (2015). Current perspective on mother tongue based instruction in the newly implemented K to 12 curriculum of the Philippines. *British Journal of Education*, 51-66.
- Tollefson , J. W., & Tsui (eds), A. B. (2004). (Mahwah, Ed.) *Medium of Instruction Policies: Which Agenda? Whose Agenda?*
- UNESCO. (2008). *Mother Tongue Matters: Local Language as a Key to Effective Learning*. Paris: UNESCO.
- Villaneza, M. R. (2016, October 10). Mother Tongue-based learning makes lessons more interactive and easier for students. Pasig: republic of Philippines; Department of Education.
- Webb, V. (2004). Language Policy and Planning in Africa. *Annual Review of Applied*, 254-273.
- Wolfaardt, D. (2005). Namibia: A Case for a Gradual Transitional Bilingual Language Program. *International Symposium on Bilingualism*. 4, pp. 2357-2368. Namibia: Somerville, MA: Cascadilla Press.
- Yagmur, K., & Extra, G. (2011, October 10). Urban multilingualism in Europe: Educational responses to increasing diversity. *Journal of Pragmatics*, 43(5), 1185-1195.
- Zergani, M. (2016, September). Effects of using and teaching with mother tongue language in primary school.
- Zia, r. (2003). Religion and Education in Pakistan: An Overview. *Prospects*, 33(2), 165-178.