COMPARATIVE STUDY OF ACADEMIC PERFORMANCE OF TEACHERS TRAINED UNDER FORMAL AND NON-FORMAL SYSTEMS OF TEACHER EDUCATION AT SECONDARY LEVEL IN PUNJAB

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ABSTRACT

The study was designed to compare academic performance of trained teachers under formal and no-formal systems of teacher education at secondary level in Punjab. The study was based on the objectives: (i) to compare the professional skills of the teachers through academic achievement of students and (ii) to check the academic performance of the teachers trained in both systems.

KEYWORDS

Teacher Education, Academic Performance, Non-Formal System, Formal System.

1. INTRODUCTION

The main hypotheses of the study were: (i) there is prominent difference among the professional skills of teachers and (ii) academic performance of teachers and their students' academic achievements.

The sample of study comprised of the four districts of Punjab selected on the basis of rural, urban, north and central geographical basis: i. Bahawalnagar- Southern ii. Lahore- Central iii. Chakwal-Central and Rawalpindi- Northern. 108 schools and their heads, 216 secondary school teachers and 674802 students selected by multistage sampling technique were included in the study. Secondary schools of 04 districts were selected.

The major findings included that (i) The mean score indicates that the student's academic achievement taught by the teachers trained through non-formal system with mean score of 3.59 was better than the teachers trained through formal system with mean score of 3.48. The obtained t-

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value was -3.06 and at 0.05. This shows that there was significant difference between the professional skills of teachers trained through formal and non-formal system. (ii) The students' academic achievement taught by the teachers trained through non-formal system with mean score of 3.81 was better than the teachers trained through formal system with mean score of 3.77. The obtained t-value was -1.07 at 0.05. This shows that there was no significant difference between the performance of teachers trained through formal and non-formal system. It was concluded that there was no significant difference between the performance of teachers trained through formal and non-formal system and there was significant difference between the students' academic achievements of teachers trained through formal and non-formal system. The study recommended that studies be carried out to identify training needs of teachers and areas where they need further orientation to strengthen weak areas.

2. THEORETICAL FRAMEWORK

All the developing countries of the world have acknowledged that education plays a vital role in the progress on any nation. Education is imparted to all the citizens of any nation through formal educational institutions. With every passing day the need and the demand of the educational institutions is being exceeded with the accessibility of educational provision. Enormous outbursts in population and insufficient resources of any country have made the formal system incapable to fulfill the needs of all learners. (Kelsey, 1993) This fact should be examined critically so that an alternative option can be provided to make educational delivery more accessible. That alternative should be to give confidence to self-learning and more economically feasible than connectional education. It should be enduring "Education for All" Democratization of education "Life Long Education" and "Further Education" are turn out to be the watch words in all the independent countries to regulate and guarantee good eminence of life to the persons in knowledge based civilization. The world 'education' itself emphasized that learning should encompass an individual's whole life.

Education of teacher belong to skill, knowledge and ability which relate the teacher life. Any syllabus regarding education of teacher based on the attitude, aptitude, lifestyle and the entire teacher personality. Teacher education can be discussed in three phases, which are Pre-service, induction and in-service. And these are now taking as a continuous process. The advancement in teacher training remained undermined throughout the development of education system in Pakistan.

According to Aggarwal (1988) and (1986), Some General objectives of education of teacher are given below:

1. The Teacher's ability should be developed for the care of himself.

2. The different level of student should be developed according to their age groups.

3. The good understanding of the subject content should be developed.

4. Skill should be developed

5. Capacity should be developed for observing, inferring, interpreting and generalizing.

6. An eye should be developed to maximize the achievements of both material and human sources.

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7. The difficulties are experienced by the students and their parents are appreciated with a sympathetic response should be developed.

8. The appropriate perception of the difficulties such as enrolment, regular attendance, year to year promotion and holding capacity of the scroll till the end of education should be developed.

Training of Teacher through non-formal method is a modern programmed for trainees'. This distance teaching program in Pakistan is offered by (AIOU) Islamabad. Teachers, who involve into the distance learning programs, not need to leave their schools, therefore a very large number of new students and teachers get admission in every program such as PTC, C.T, B.Ed., MS and PhD programs . The objectives of these programs are mentioned below:

•   These programs provide knowledge for the practical role of education in society.

•   These programs provide information about contributions of subjects which are taught in the Primary, Secondary and higher Academic schools for the development of children's.

•   The awareness about the process of curriculum development is achieved through these programs.

•   The importance of school-community and teacher-parent relationship are appreciated by these programs.

Singh (1988) stated that teacher training is followed back to monitorial framework in 1789 on account of Rev Andrew Bell, the director of a male asylum Anglo-Indian vagrant and down and out at Madras. Bell said that despite shortage of teachers, the boy of his asylum educated their colleagues.

The value of education must be coordinated to education of teacher without which teachers' can't be equipped with methods and techniques of teaching. Teachers are centers of teaching-learning process. They play significant role to in enhance the quality of system of education. For this purpose pre-service and in-service teaching program are inevitable (Govt. of Pakistan, 1998).

David and Macayan (2010) stressed on the importance of teacher's execution. They say that the rewards and appraisal brings significant difference in the performance of the teacher. The evaluation based on the performance of the teacher can be properly maintained if is done after the training of the teachers both in formal and non-formal system. It likewise gives data about the qualities and downsides of a teacher. It helps the experts in arrangement making in teachers appointment process handle.

According to Keegan, (1986) "non-formal system of education has following features':

•   No connection between students and teachers

•   Influence of an educational organization without any external pressure.

•   Worth appreciating utilization of technical media

•   Interactive communication should be provide

•   Occasional seminars are arranged.

- Enrolment in the education

- The privatization of learning

Ahmed (2001) conducted a study which based on the "Identification of Teaching needs of Personnel Involved in Distance Education." The study was based on the purposes: to recognize the training needs of personal involved in distance education. The samples of the study showed the significance of training for educational and personal development. Analysis of the data demonstrated that the accomplishment of the staff rely on the pre-service training.

Willy (2012) conducted a review on investigating formal and non-formal training suggests for coordinated and different education conditions in "Uganda Willy Ngaka", Makerere University. This paper investigated open doors for coordinating formal and non-formal instruction in Uganda in ways that benefit students get, manufacture and keep up profitable aptitudes for supportable jobs. The blend of formal and non-formal training is perfect for advancing practice situated abilities realizing which can altogether enhance Uganda's education system which is as of now excessively hypothetical for tending to individuals' genuine needs. It ought to be called attention to that non-formal education ought not to be thought to be for non-literates simply because it accommodates educated individuals and contribute towards enhancing their occupations.

Maina Moses (2014) directed a review on quality of teachers in certain public secondary institutions in Kenya. As indicated by the "Ministry of Education Science and Technology" (MOEST) report of 3rd Education of Teacher Conference in (1995) in Njoro, the teachers' performance depend on several indicators including professional training, state of mind, intellectual foundation and the training framework the selected staff for their professional development. After evaluation it was concluded that the performance of the students is poor and needs improvement. Teacher performance was measured as far as understudy scholarly execution. It's upon such a foundation, to the fact that this review was led to investigate teacher considers that might be in charge of the poor student performance in the students of Kamacharia Division, Mathioya District, Kenya.

3. STATEMENT OF THE PROBLEM

"Comparative study of academic performance of teachers trained under formal and non-formal systems of teacher education at secondary level in Punjab.

4. PURPOSE OF THE STUDY

The present study was designed at achieving following purposes.

1. For studying the professional skills of teachers trained under formal and non-formal systems of education of teacher at secondary level in the Punjab.

2. For studying the academic achievement of the students of secondary school level being taught by the teachers trained under formal and non-formal systems of teacher education in the Punjab.

3. For comparing the academic performance of the teachers trained under formal and non-formal systems of education of teacher in the Punjab.

5. HYPOTHESIS OF THE STUDY

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Following hypotheses will be tested the study

1. The teachers of the secondary schools trained under formal and non-formal systems of teachers' education differ significantly with regard to possession of professional skills.

2. The significant difference among the academic achievements of secondary schools students being taught by teachers trained under formal and non-formal systems of teacher education.

3. Male and female teachers of secondary schools trained under formal and non-formal systems of education of teacher differ significant the aspect of academic performance.

6. POPULATION

The entire lot from which the sample of the research study is taken is called population. The study was comprised of three types of population.

1. Total heads of Government secondary schools of the Punjab.

2. Total teachers trained through formal system of teacher education and other teacher trained through non formed system of teacher education of Government secondary Schools of Punjab.

3. Total students of Government secondary schools of the Punjab.

No. of Schools and Heads			Teachers			Students		
Male	Female	Total	Male	Female	Total	Male	Female	Total
3386	2879	6265	64440	56286	120726	2166461	1581710	3748171

Source: Punjab School Education Department, Government *of Punjab Program Monitoring and Implementation Unit (PMIU) 2014 School Census. Retrieve on 15.05.2016.*

DAMOGRAPHY (Demography of Punjab)

Source: Punjab School Education Department, Government of Punjab Program Monitoring and Implementation Unit (PMIU) 2014 School Census. Retrieve on 15.05.2016.

Sample

Multistage sampling as detailed below was used for the study.

   a) Stage I Selection of Districts

Four districts was selected based on rural, urban north, southern, central etc. geographic base. Following four districts were the sample districts.

   (i) Bahawalnagar   Southern Punjab

   (ii) Lahore   Central Urban

   (iii) Chakwal   Central Rural

   (iv) Rawalpindi   Northern Punjab

   b) Stage II   Selection of secondary level teachers

Formal and non-formal system in Punjab

Secondary schools of districts were selected on the basis systematic /stratified cum random.

S. No	Districts	2 Teachers per School						No. of Students		
		Formal			Non formal					
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Bahawalnagar	10	8	18	10	8	18	63353	30802	94155
2	Lahore	16	16	32	16	16	32	160170	168475	328745
3	Chakwal	10	12	22	10	12	22	52976	32649	85625
4	Rawalpindi	20	16	36	20	16	36	82415	83862	166277
Aggregate		56	52	108	56	52	108	358914	315788	674802

7. DELIMITATIONS

The study was delimited to:

1. Province of Punjab – Pakistan.

2. Only four districts of Punjab were selected.

3. Secondary schools of government sector.

4. Government secondary school teachers only.

8. INSTRUMENTATION

The researcher was used following tools for the data collection.

1. An observational schedule for professional skills of teachers (Developed by researcher) (Annex-A) (27 items)

2. A questionnaire for heads regarding the performance of their teachers (Developed by researcher) (Annex-B) (24 items)

3. Subjects results from the gazette of (Board of Intermediate and Secondary Education) for academic achievement of the students. (Year 2015)

9. DATA COLLECTION

Data was collected through questionnaires and observational sheets. The investigator individually visited the sample schools and administered the questionnaires on sample subjects for collecting data. Some questionnaires were sent through mail. A covering letter was attached with each questionnaire in which objectives of the research were explained.

After a great effort and personal contacts the head teachers and teachers and explained the objectives of the study to them. The respondents were assured that the data providing by them would be kept confidential. There was not any kind of undue stress and control over the head teachers and teachers at the time of completion of the questionnaires. After completion the questionnaires and individual contacts with respondents, it was possible to accumulate proper number of respondents.

10. ANALYSIS OF DATA

The Data which were collected from sample secondary schools were represented in tabular form. During tabulation, the data were collected through questionnaire and observation sheet were processed, analyzed and discussed. The analysis of open-ended items of the tools was prioritized on the basis of percentages and rank.

Table 1. Comparison of cumulative pictures of teachers trained through formal and non-formal system

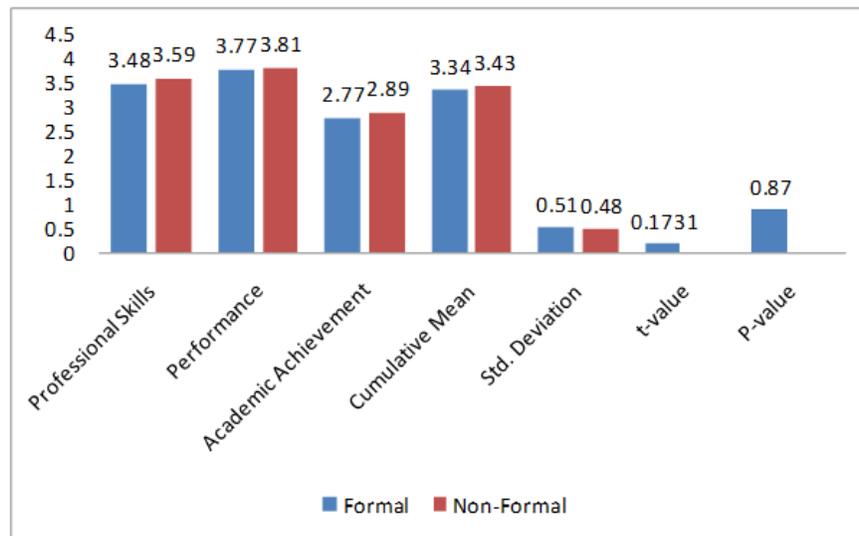| Sr. No.	System of Training	Professional Skills	Performance	Academic Achievement	Cumulative Mean	Std. Deviation	t-value	P-value
1	Formal	3.48	3.77	2.77	3.34	0.51	0.1731	0.87
2	Non-Formal	3.59	3.81	2.89	3.43	0.48		

Fig. 1. Graph showing the Comparison of cumulative pictures of teachers trained through formal and non-formal system

Table 1: describes the mean; standard deviation and the corresponding t-value for comparison of students' academic achievement of teachers trained through formal and non-formal system. The mean indicates that the students' academic achievement taught by the teachers trained through non-formal system with mean 2.89 is better than the teachers trained through formal system with mean 2.77. The obtained t-value is -4.32 at (0.05). This represent that there is significant difference among the students' academic achievements of teachers trained through formal and non-formal system.

11. FINDINGS

1. The student's academic achievement taught by the teachers trained through non-formal system with mean score of 3.59 was better than the teachers trained through formal system with mean score of 3.48. The obtained t-value was -3.06 at (0.05). This represent that there

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was significant difference among the professional skills of teachers trained through formal and non-formal system.

2. The mean indicates that the students' academic achievement taught by the teachers trained through non-formal system with mean 2.89 was better than the teachers trained through formal system with mean 2.77. The obtained t-value was -4.32 at (0.05). This represent that there was significant difference among the students' academic achievements of teachers trained through formal and non-formal system.

3. The mean score indicates that the student's academic achievement taught by the teachers trained through non-formal system with mean score of 3.81 was better than the teachers trained through formal system with mean score of 3.77. The obtained t-value was -1.07 at (0.05). Representing that there was no significant difference among the performance of teachers trained through formal and non-formal system.

4. Comparison of professional skills of male teachers trained through formal system with mean score of 3.54 was less than the professional skills of male teachers trained through non-formal system with mean score of 3.60. The obtained t-value was -0.47 at (0.05). This represent that there was insignificant difference among the professional skills of male educators trained through formal and non-formal system.

5. The mean score (3.98) of professional skills of urban-female teachers trained through formal system which was better than the mean score (3.78) taught by urban-female teachers trained through non-formal system. The calculated t-value was 1.59 at (0.05). It represent that there was significant difference among the professional skills of urban-female educators trained through formal and non-formal system.

6. The mean score indicates that the student's academic achievement taught by the teachers trained through non-formal system with mean score of 2.89 was better than the teachers trained through formal system with mean score of 2.77. The obtained t-value was -4.32 at (0.05). This represent that there was prominent difference among the students' academic achievements of teachers trained through formal and non-formal system.

12. CONCLUSION

1. There was no significant difference among the performance of teachers trained through formal and non-formal system.

2. There was significant difference among the students' academic achievements of teachers trained through formal and non-formal system.

3. There was significant difference between the professional skills of teachers trained through formal and non-formal system.

4. There was significant difference between the students' academic achievements of teachers trained through formal and non-formal system.

The hypothesis no.1 i.e. "the teachers of secondary schools trained under formal and non-formal system of teacher education differ significantly with regard to possession of professional skills" is hereby rejected.

The hypothesis no.2 i.e. "the significant difference among the academic achievements of secondary schools students being taught by the teacher trained under formal and non-formal system of teacher education" is hereby accepted.

The hypothesis no.3 i.e. "male and female teachers of secondary schools trained under formal and non-formal system of education of teacher differ significantly the aspect of academic performance" is hereby rejected.

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