Evaluation of Financial Subsidy Program of Punjab Education Foundation for Increasing Student’s Enrollment and Retention in Private Schools in Punjab

Abstract
This study retrospects the idea of financial assistance program (school voucher program) proposed by Milton Friedman, lately developed by Peacock, Wiseman and Jencks. It examines the current education voucher program of Punjab education foundation designed for students of low-income families. The research aims to see efficacy of Public Private Partnership in school education in Punjab. It analyzes private schools’ choices for poor students through government financial subsidy program for basic education in Punjab. The financial subsidy program has become pervasive recently. The research was descriptive in nature based on opinions of Program administrators/Directors of Punjab Education foundation, Schools’ owners, Principals, teachers and parents related to private schools of Punjab education foundation. The results drawn through observation, questionnaires, interviews, checklists indicated that this program increases choices for poor families to enroll their children in schools of their preference because of quality, pedagogical approaches, affordability and geographical location regardless of financial barriers.

Key Words: School Enrollment, Vouchers, Low Income Families, Public Private Partnership, Financial Subsidy

Introduction
Education is important for social wellbeing and financial growth in developing as well as developed republics. The increasing incident of children enrollment in school is a broadly acknowledged main concern in the fight against poverty. The low-income republics face a discouraging chore in their determinations to expand the provision of educational facilities due to speedily increasing masses and fitted government finances. Countries like Pakistan always face financial crisis in education. The disasters were branded by high rates of inflation, reduction in public finances for education sideways with cumulative student’s figures, deteriorating per student expense, tremendously insufficient speculation in the quality of education, plain alterations in delivery of funds, gathering of inequalities in disbursements on education. The evolving private education schemes are found to be making serious problems in standings of access, quality and equity in education. In short, the evolving private education system be summed up as an alteration of academic foundations into commercial foundations, whose single most significant objective appears to utilization of more and more educational resources (Raines & Leathers, 2003). There has been great controversy concerning the efficacy of financial subsidy program that it will likely become a prominent feature on the Pakistan edification system designed for low income family’s students. However, this remarkable momentum scrounges the question regarding the true efficacy of financial subsidy program. This research might expect to see compelling evidence of the impact of this financial subsidy program (voucher program).

Objectives
Following were the study objective,
1. To find out impact of financial subsidy program on enrollment of low income families’ students in private schools in province Punjab.

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2. To study the effectiveness of financial subsidy program for low income families’ students as compared with other students in same private schools.
3. To determine whether the impact of financial subsidy program help in retention of low-income families’ students in private schools.
4. To determine whether program components are producing the desired progress on outcomes.

**Hypotheses of the Study**

The following hypotheses were formulated as per objectives of the investigation:

H 1: There is strong relationship between financial subsidy program and student’s enrollment in private schools.

Ho 1: There is no relationship between financial subsidy program and students’ enrollment in private schools.

H 2: There is strong relationship between financial subsidy program and students’ retention in private schools.

Ho 2: There is no relationship between financial subsidy program and students’ retention in private schools.

**Review of Related Literature**

This research study developed its theoretical framework from literature of financial subsidies programs (vouchers programs) primarily on incentive-based models for education experienced in all over the world.

**Theoretical Background of the Study**

The educational subsidy program (through vouchers) was initially conceived as a way to raise race between schools, which in chance escalation in general educational excellence or eradicate individual schools that cannot retain stride. This struggle sideways with the voucher will upsurge school high-quality for all children (Levin, 2002). The conceptual theoretical framework of financial subsidies replicas as existence contained of four philosophies, parent’s choice, personal progression or chance to select, the upgrade of rivalry, and equivalent occasion (West, 1997). Levin’s (2002) conceptual framework of study also stresses four values of financial subsidy program are liberty to choose, productive competence, equity, and social cohesion.

The stumpy educational achievement in the emerging world countries is often accredited in part to the private budgets related to referring kids to public and private schools. The straight and unintended educational expenses may also eliminate less-income families from private schools. The straight costs may come in the method of school fees and textbooks, and unintended costs represent, for case, costs due to lost labor opportunities for children. The kids of the lowliest income families in emerging countries consistently signify the lowermost proportion of eligible students appearing school (Thapa & Mahendra, 2010).

Stufflebeam is a dominant advocator of a choice focused on assessment method “designed to help managers make trade good decisions his move to assessment is familiar as the CIPP model. The CIPP model stands for evaluation-context, input, process and product.

**Research Method and Study Overall Procedures**

This research study was descriptive in nature. The study reviews the opinions/viewpoint of program administrators/ Program directors (Punjab Education foundation) school owners/ Principals/ Teachers and students’ parents, studying in subsidized private schools of (PEF) through questionnaires, interviews, observation and checklists for finding program results.
Population

The total population of this research study related to this financial subsidy program of PEF was as under,

1) Chairman, 01
2) Managing Director, 01
3) Deputy Managing Directors, 02
4) Directors, Deputy Directors, 10
5) Assistant Directors, 20
6) Principals of EVS partner’s schools, 812
7) Teachers of EVS partner’s schools, 4872
8) Parents of EVS students, 72314

Table 1. Population and Sample Framework

<table>
<thead>
<tr>
<th>S. No</th>
<th>Population &amp; sample Data</th>
<th>(NO. of schools)</th>
<th>Total Teachers (6 teachers per school)</th>
<th>Total families EVS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grand Total (population)</td>
<td>812</td>
<td>4872</td>
<td>72314</td>
</tr>
<tr>
<td>2</td>
<td>Sample size (as per questionnaires data)</td>
<td>324=40% Data collected=318</td>
<td>2245=40% Data collected=1926</td>
<td>3611=05% Data collected=2847</td>
</tr>
</tbody>
</table>

(Estimated & obtained data of 04 teachers from Primary & Elementary schools, 06 teachers from secondary schools. Also, five (05) families selected from PEF-EVS each partner school functioning under PEF-EVS)

Sample for the Study

For the current investigation, the sample size consisted of 100% Program staff of Punjab Education Foundation in all three regions (North, South & Central), 40% of population of Schools Principals of EVS program, 40% of population of total teachers (04 senior most teachers) from each partner school of PEF as sample data in Punjab except district Jhelum due to non-availability of private subsidized school of PEF in this area. The further, 05 % sample of total population of families of EVS students studying under PEF subsidized private schools in all selected districts of the Punjab Province. (LRGay-2007) The researcher used simple random technique to collect the data. The research interpretation procedure was used for the current study as it is about the survey method, which is the present trend or the problems, conditions and relationships that exist between variables.

Tools Used in the Study

The subsequent declared instruments were used to conduct the present study,

- Questionnaires for Program staff. (annex-A)
- Questionnaires for Principals & Teachers. (annex-B)
- Questionnaires for parents (annex-C)
- Students results (Results checklists) 5th, 8th 9th & 10th of PEC & BISE. (annex-D)
- Also, PEF QAT results from 2005 to 2014. (annex-E)
- Enrollment data from year 2005 to 2014. (annex-F)
- Interviews (annex-G)
- observations (annex-H)
- In the light of collected data (Qualitative Method-CIPP)
Data Collection and Use of Statistical Techniques

Data Collection
According to the design-based research method, the data was collected in three-stage procedure for re-setting the program under this study. The data was the triangle through the use of the CIPP survey open & close ended questionnaires, focus-group and face to face interviews, and checklists Performa’s.

Instrumentation
After improvement of the tools and validating the linked tools, the researcher communicated the management of Punjab Education Foundation and schools Principals for attain consent for gathering data from their teachers and students’ parents whose children are enrolled under this scheme (voucher program). After securing the necessary permission from PEF and Principals/owners. The researcher clarified the objectives of the study and provided all the participants with tools (questionnaire). The clear directions were given on the instruments (questionnaire). In some places, researchers talked with the school principals / teachers and replied to all their questions. Statistics (data) were collected in the year 2015-16. Due to the large population and sample size, it takes about two years to gather data from the principals, teachers and students’ families.

Instruments Reliability
The results of the pilot study presented that the reliability coefficients Cronbach’s Alpha .758, .868, .812 for questionnaires 1, 2 & 3 respectively. This is an acceptable level of reliability when considering that coefficients are more reliable when approaching 0 to 1. No other combination produced a higher coefficient. In addition, the calculations were analyzed to determine if the top operand would result in the cancellation of one or more questions. Again, the elimination of one question has not led to much difference. Hereafter, these instruments were believed to be appropriate for data collection from PEF officials, Principals/Teachers and student’s families who are related to this program of Punjab education foundation.

Data Analysis Techniques

Data Analysis
The subsequent two (02) different statistical methods were engaged to examine the data gotten in order to test the study hypotheses. The statistics (data) from the participants were inter into the Statistical Package for Social Sciences (SPSS) computer program for interpretations. In addition to a variety of summary statistics, the researcher used one-way ANOVA and t-tests and method to explore relationships within the data of this program. The one-way ANOVA, t-test was also used to determine if there was a relationship between FSP & students results from year 2005 to 2014 respectively.

Procedural Steps for Validity and Reliability
The questionnaire was vetted for phrasing and linguistic in order to enhance its user openness. The content of the questionnaire was presented to researchers’ supervisor to ensure that the questionnaire material is able to study the purposes and answer the questions of research effectively. This step was better in content, language and words validity. It was said that experts from various subjects and some senior researchers have written the questionnaire’s content so that we can ensure that content and satisfaction of the questionnaires. (Thomas Frankle & LRGay-2007). To decrease the concerns of participants, researchers convinced that their reactions would be used only for research drives and from a region where the problem was sent to the schools where the questionnaires were sent through post office. In addition, the cover letter was obviously stated that research was in a joint benefit and its results would help the principals/teachers and program management team. A method of random
effects model was used to ensure the stability of intro class wise items. The study constructed on the beyond assertion, the alpha level in the current study remain was 0.05.

Data Analysis Procedure

The present research study explores the usefulness of Public Private Partnership in private’s education in province Punjab. Firstly, data was collected from three different categories of respondents: PEF officials, Principals/owners, senior teachers, principals, educationist’s, and parents of EVS students. Secondly, data were collected through a study of program related documents, student’s results and related previous literature of this program. The data were presented in both qualitative and quantitative treatments. For determining the internal consistency of the data one of the important measures is Cronbach’s Alpha.

Table 2. Responses of Principal/Teacher of Punjab Education Foundation to Questionnaires-2, Student Enrollment Related Responses Results

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>FSP</td>
<td>1418</td>
<td>1.4807</td>
<td>.54279</td>
<td>.01441</td>
<td>1.4524</td>
<td>1.5090</td>
<td>1.00</td>
</tr>
<tr>
<td>NONFSP</td>
<td>824</td>
<td>1.4642</td>
<td>.53710</td>
<td>.01871</td>
<td>1.4275</td>
<td>1.5009</td>
<td>1.00</td>
</tr>
<tr>
<td>Total</td>
<td>2242</td>
<td>1.4747</td>
<td>.54064</td>
<td>.01142</td>
<td>1.4523</td>
<td>1.4970</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Null Hypothesis: Ho: U₁=U₂=U₃=…=UK, Group Name: FSP-students-1, Non-FSP-students-2

Table 3. ANOVA

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.142</td>
<td>1</td>
<td>.142</td>
<td>.287</td>
<td>.585</td>
</tr>
<tr>
<td>Within Groups</td>
<td>654.889</td>
<td>2240</td>
<td>.292</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>655.032</td>
<td>2241</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Explanations of Results

The researcher applied ANOVA test because the dependent variables are measured on interval scale and the independent variable financial subsidy program (FSP) is a categorical variable involving two categories (FSP-students & No FSP-students). Here the researcher wants to see whether the mean of two groups of each dependent variable with respect to independent variable are significantly different or not. From the above table, the researcher sees that means of two groups enrollments (FSP & Non-FSP) are statistically different as F=.093 and Sig.761<0.05. So, it’s concluded that financial subsidy program has positive significant impact on student’s enrollment.

Table 4. Responses of Principal/Teacher of Punjab Education Foundation to Questionnaires-2, Student Retention Rate Related Responses Results

<table>
<thead>
<tr>
<th>Descriptives DropRetRate</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
</tbody>
</table>

Global Social Science Review (GSSR)
Null Hypothesis: Ho: U1=U2=U3=…=UK, Group Name: FSP-students-1, Non-FSP-students-2

Table 5. ANOVA

<table>
<thead>
<tr>
<th>Dropout Rate</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.020</td>
<td>1</td>
<td>.020</td>
<td>.161</td>
<td>.689</td>
</tr>
<tr>
<td>Within Groups</td>
<td>281.698</td>
<td>2240</td>
<td>.126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>281.718</td>
<td>2241</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Explanations of Results
The researcher applied ANOVA test because the dependent variables are measured on interval scale & the independent variable financial subsidy program (FSP) is a categorical variable involving two categories (FSP-students & No FSP-students). Here the researcher wants to see whether the mean of two groups of each dependent variable with respect to independent variable are significantly different or not. From the above table, the researcher sees that means of two groups retention rate (FSP & Non-FSP) are statistically different as F=.161 & Sig.689<0.05. So, it’s concluded that financial subsidy program has positive significant impact on students ration rate.

Descriptive Statistics
The data is a panel data representing 34 districts & ten (10) years’ time period. So, the total value in the pool data are N=340. Following below tables shows overall results of FSP (EVS) & Non FSP (Non EVS) student’s enrollment and retention rate data during the during the years 2005-2014.details students’ enrollment & retain ratio have been shown in subsequent diagrams.

Inferential Statistics
Table 6. Group Statistics

<table>
<thead>
<tr>
<th>EnFSP</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>EnrolledFSP</td>
<td>340</td>
<td>1390.45</td>
<td>535.019</td>
<td>29.015</td>
</tr>
<tr>
<td>Enrolled-NonFSP</td>
<td>340</td>
<td>1426.22</td>
<td>667.694</td>
<td>36.211</td>
</tr>
</tbody>
</table>

Table 7. Independent Samples Test

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>25.212</td>
</tr>
<tr>
<td>Enrolled FSP</td>
<td>Equal variances not assumed</td>
</tr>
</tbody>
</table>

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Explanation of the above Table’s Results

The above first table showing results of student’s enrollment, we may see that Levene’s Test for Equality of Variances is significant as F=25.212, p=0.000<0.05. So, we take t value that assumes equal variance in both types of school (having financial subsidy & No subsidy). The t-test suggest that the difference between average enrollment in schools FSP & not having FSP is insignificant, as t=-.771, p=.441> 0.05. So, there is no difference between the average enrollment in schools who have financial subsidy & those who have no financial subsidy.

The above second table showing results of leftover of Financial subsidy & No financial subsidy students, we may see that that Levene’s Test for Equality of Variances is insignificant as F=1.1840, p 0.175>0.05. So, will take value of t-test that assume not equal variances. The t-test suggests that the difference between average leftover students in school who have FSP & those who have no FSP is significant as t=7.342, p=0.000<0.05. So, we may conclude that average left-over students in schools with & without FSP is different. It’s concluded that financial subsidy program has positive significant impact on students and also significant positive impact on decreasing students left over in schools.

Findings of the Study

Findings Based on Responses of Principals and Teachers of PEF

From the above table data linked to student’s enrollment, the researcher see that means of two groups enrollments (FSP & Non-FSP) are statistically different as F=.093 & Sig.761<0.05. So, it’s concluded that financial subsidy program has a positive and significant impact on student enrollment.

Findings of the Study Related to Student Enrollment & Leftover (Result of T-Test)

The above table showing results of students’ enrollment, we may see that Levene’s Test for Equality of Variances is significant as F=25.212, p=0.000<0.05. So, we take t value that assumes equal variance in both types of school (having financial subsidy & No subsidy). The t-test suggests that the difference between average enrollment in schools FSP & not having FSP is insignificant, as t=-.771, p=.441> 0.05. So, there is no difference between the average enrollment in schools who have financial subsidy & those who have no financial subsidy. The above second table showing results of leftover of Financial subsidy & No financial subsidy students, we may see that that Levene’s Test for Equality of Variances is insignificant as F=1.1840, p 0.175>0.05. So, will take value of t-test that assumes not equal variances. The t-test suggests that the difference between average leftover students in school who have FSP & those who have no FSP is significant as t=7.342, p=0.000<0.05. So, we may conclude that average left-over students in schools with & without FSP is different. The null and alternative hypotheses for the tests are stated as (both voucher eligible and non-voucher eligible students), there is positive change in the access, enrollment, retention, dropout rate and completion rate for the ten years’ time period as after the introduction of vouchers program (FSP). The researcher rejected the null hypothesis and found that there is a significant change in both voucher and non-voucher students at p<.05. For voucher eligible schools, the annual output was more than as the rate of the rest of other children enter in the non govt. schools. It could be resolved this the competitive effect of (FSP) vouchers continues to help drive student scores upward in those years. The results of the different research questions established that voucher program effect as a catalyst for private schools’ improvements. It seemed that voucher eligible schools are closing the achievement gap and headed in the right direction. The study investigated the potential of voucher program and other variables affected through financial subsidy for students of low-income families.

Discussion of the Study

The general outcomes of the study viewing that financial subsidy model (voucher program) provided government funds to eligible poor families to smear concerning the tuition fees for participating in private schools. The planner and management of this program claims that some major outcomes of
this program are to upsurge school choice and enrollment by alleviating financial problem linked with private school admission expenses and which eventually simplifies school competition between private schools thereby increasing education excellence for all students. The design of CIPP model, and its types and relationships for preparing the ideological concepts of financial subsidy programs for better access to private schools in Punjab. This research is to understand the impact of the unique intervention of the financial subsidy scheme in the education market. It looks like a classical Friedman (1955, 1962) type of voucher model presented in the USA.

The study inferential statistic’s results related to first objectives shows that since the financial subsidy program introduced, the student’s enrollments ratio has increased relatively in private schools. The scale of public private schools was broad, and the students studying got the government subsidy to get basic education. The school voucher program has absorbed market capitals to invest in education, which results in accelerating private education, helps students’ study, and on the other hand equals educational equality. Under the control of the government, not just a good policy but to guide to new educational market, but it also gave students a special right of private school choice. More evidence of the financial subsidy program shows that open more private schools and in Govt. school transfer of students and financial plans to private schools. Many countries have adopted voucher programs and private school registration has increased (Angstus 2002).

Analysis of the findings related to another objectives student’s retention related indicates that results suggest small positive effects of voucher assignment on retention in education as measured 10 years after application. The results showed a significant retention rate of students after implementation of financial subsidy program. A study conducted by (Wessel-2006) found that students who had a greater financial need persisted at lower rates. Therefore, the fourth hypothesis proposes that loans had a positive influence on retention rate. The effect of this program on the related results is different effects. First of all, students who do not get better results from fees voucher to attend a private school, will get more non-voucher students. Secondly, financial subsidy scheme encourages students to attend different private schools, in such way to transform student's capabilities, races, or revenue sharing in private schools. Thus, the financial subsidy program offers and promotes competition, so to get better results among students to attend private schools. The program management (PEF officials) highlight the qualities of competition in private schools, while other allies emphasize deteriorating peer quality in private schools. The size of the population is very important for analyzing study results. Small proportions of students are eligible; effects are limited to students who use fees vouchers rather than public schools’ students who not using vouchers.

**Conclusion of the Study**

According to the study results, it was concluded that the most important part of this education theory was to build knowledge regarding education vouchers, which includes the impact on student enrollment and retention. The CIPP rule method is adopted as well as a key factual approach and related tools of descriptive and inference statistics. By means of presented in previous chapter four, the study offers a CIPP model and a theory produced an explanation of the causes and contingent special effects on access, enrollment, dropout, completion rate & performance of students under the intervention of financial subsidy.

Program designer and program team mentioned that parents of students send their children’s due to school's quality, curriculum approach, affordable or geographical location and wish to enroll children in PEF schools because of their priorities of private schooling in province Punjab. Some responded that vouchers are fairly fair because parents get equal equality from the government’s financial support. This possibility of gaining an effective investment increase in basic level enrollment through the help of private schools is confirmed by this study with an experiment. Despite having great success, the financial subsidy program looks like a drop in the ocean. In Pakistan, the number of children over 6.5 million schools is outside the schools. They extend the school's structure despite the free education from the government. So, concluded remarks are that this program was
implemented with full potential and getting the planned outcomes. The context of the program, in Punjab, the program was designed and developed for low income families and cover tuition fees of students only. This concept clearly negates voucher concept of Friedman who supports to provide to all parents (who required) and voucher should cover all school expenses. The program was designed for all Punjab province but due to unknown reasons program was not started in district Jhelum.

- **Input:** initially the program was started for 30,000 students increased to 490,000 students. Through the implementation of this program, the teachers get better salary & incentives. Also, Teachers getting better trainings,

- **Process:** School environment is conducive for learning; Parents are engaged for their child education. Community involvement was increased after this program.

- **Product:** The objective of the program was that "no student is deprived of education for lack of financial means. It is noted education expansion related to this program,
  
  (a) Availability of suitable premises,
  (b) Availability of access to for creating new provision,
  (c) Availability of trained staff.
  (d) The parents / students are allowed to use public funds to pay tuition at private schools
  (e) Private schools made accountable through this program.

**Recommendations**

- Finding of the study indicate positive results of financial subsidy program for students of low income families especially students access for private schools increased, students enrollment ratio in private schools is improved, dropout ratio is decreased & retention rate is increased so, it therefore proposed that this program may be continued in future and spread throughout the country.

- Findings of the study indicate that financial subsidy did not provide funding equivalent to private school teaching fees and low-income families cannot be able to send their children to a private school, who spend more than the voucher's amount and those students live outside the school. So, it’s therefore suggested that poor families with more financial freedom, can mobilize parents to send their children to even more private schools.
References