

Antecedents of Early Childhood Special Education Program: A Stake's Model Perspective

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Abstract

Antecedents are the conditions existing prior to instruction that may relate to outcomes. For program evaluations, the information about antecedents helps in determining the anticipated outcomes. The main focus of this quantitative investigation was to identify antecedents of Early Childhood Special Education (ECSE) program for young children with deafness enrolled in 34 Government Deaf and Defective Hearing schools located in 31 districts of the Punjab province. A self developed and validated demographic information sheet consisting of 26 variables was used to collect data from schools. All the head teachers helped in filling up the information sheets about young children with deafness. The data were analyzed through SPSS version 20. The descriptive statistics exhibited district wise enrolment, and gender, age, type and degree of hearing loss wise distribution of young children with deafness. The study also answered some other questions regarding children using hearing aids, undergoing cochlear implants, taking benefit of school transport, the socio-economic status of their parents including qualification, income, profession, location of home etc. The study also informed about number of parents and siblings with and without deafness. Gaps were identified in ECSE program for young children with deafness. Conclusions were drawn and recommendations to Punjab Special Education Department were made.

Keywords: Antecedents, early childhood special education, stake model, young children with deafness

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Introduction

During the decade of 1990s, Education for All (EFA) provided a framework for designing and implementing education policies throughout the world, specifically in the sphere of basic education (Report on 'Right to Education' in Pakistan, 2011; Torres, 1999). The Dakar Framework for Action, Education for All: Meeting our Collective Commitments was adopted by The World Education Forum (26-28 April 2000, Dakar). The members reiterated the idea of the World Declaration on Education for All adopted ten years earlier (Jomtien, Thailand, 1990). Pakistan is a signatory to the Universal Declaration of Human Rights (1948), The World Declaration on Education for All (EFA) 1990, The World Education Forum: Dakar Framework for Action (2000), the Millennium Development Goals at the United Nations Millennium Summit in New York (2000). Pakistan has pledged to undertake essential steps for providing all levels of education to all children with and without disabilities focusing mainly on early childhood education, ignoring all sorts of disparities (Farooq, 2009; Pildat, 2010).

The importance of early education for children with disabilities was acknowledged right after the establishment of Pakistan on August 14, 1947. Time and again, different governments put efforts in formulating policies and plans of action regarding early childhood education, and the education for children with disabilities. The Pakistan Educational Conference (1947) emphasized "Children between the ages of 3 and 6 needed attention in special schools. Government might give a lead in opening a few pre-primary schools and their provision should be left mainly to private agencies" (p.20). The subsequent national education policies including Report of the Commission on National Education (1959, Chapter: 16, pp.257-259), and National Education Policy and Implementation Programme (1979, pp. 28-29) put emphasis on the education and rehabilitation of children with disabilities.

A glance at the national policies formulated in the later years reflects that the National Education Policy (1998-2010) intensely called "kachi" as the first class in primary schools. The importance of early years for the education of young children was stressed in National Education Policy (2009) by using the term Early Childhood Education (ECE) and mandating one year pre-primary education for all children between 3-5 years of age and a two year specialised training for teachers in dealing with young children. National Policy for Persons with Disabilities (2002) focused the equal rights, opportunities, an access to education, and rehabilitation for children with disabilities. National Plan of Action (2006) stressed the early detection of disabilities and provision of early intervention services to young children with special needs using the term Early Childhood Development (ECD).

Background of the Study

As far as special education in Pakistan is concerned, the Provincial Government of the Punjab is running 222 special education institutions. After the 18th Amendment in the Constitution of Pakistan, devolution took place on 30th April, 2011 and 29 federally administered special education centers also came under the control of the provincial government. The enrolment rate of children with disabilities in these institutions up to November, 2013 was 27,679. The annual budget estimation for the year 2013-2014 (provincial portion) was Rs: 47, 24, 80,000/-. District wise budget allocation for the year 2013-2014 was Rs:2,886,236,139/- (Directorate of Special Education, 2013).

The provincial government of the Punjab is running 34 Government Deaf & Defective Hearing Schools (enrolment=6164), 119 Government Special Education Centres (enrolment=8,028), two Government Degree Colleges (enrolment=448), six devolved special education centres (enrolment=695) and training colleges (enrolment=52). In this way, number of children with deafness enrolled in special education institutions is 16082 which constitute 58% of the enrolment of all children with other disabilities. Two hundred and eighteen (218) Senior Special Education Teachers (BPS: 17) and one hundred and seventy (170) Junior Special Education Teachers (BPS: 16) are appointed in 34 Government Deaf & Defective Hearing Schools (Directorate of Special Education, 2013).

The Government of the Punjab is spending major portion of Special Education budget on the education of children with deafness. But the students with deafness are lagging far behind hearing students and other students with disabilities (visually impaired and physically handicapped) in academics (Gallaudet Research Institute, 2005; Stinson & Walter, 1997), social integration (WHO, 2013) and job placement (Blanchfield, Feldman, Dunbar, & Gardner, 2001; MacLeod-Gallinger, 1992; Schreodel & Geyer, 2000). Despite spending a long period of time in schools, the speech and language (both oral and written) of students with deafness are not developed to the extent they have residual hearing (Hart & Risley, 1995; Latif & Watto, 2005; Parveen, 2007). It leads to creating communication barriers and results in poor academics (Bano, 2007; Bove, 1991; Marschark, 2006; Meadow-Orleans, 2001; Moores, 2003), social exclusion and poor rate of job placement (Bashir, 2009).

Additionally, educated persons with deafness who have got jobs are not performing up to the mark due to poor reading, writing and mathematical skills and problems in communication with hearing persons (Zulfiqar & Kousar, 2006). All these details create distressing situation in connection with the future prospects for these individuals. Punjab Special Education Department is not successful in educating and rehabilitating the students with deafness despite spending much financial, human and economic resources. In the light of national and international scenario regarding education of students with deafness, it was desired to conduct an in-depth study to find out the root causes of the poor academic plight of persons with deafness which have pushed them back from playing their active roles in the matters of common national interest as patriotic citizens of Pakistan. It was a sensitive time to give practical suggestions to remove the causes and improve the existing situation prevailing in deaf schools when international community was searching new horizons for the education of children with disabilities.

Rationale of the Study

The present condition of students with deafness finds its roots in early childhood special education which is being provided to young children with deafness in Government Deaf & Defective Hearing Schools in the Punjab province. It seems that this program is not fulfilling its objectives and some gaps are lying there. It has motivated me to have a detailed study of antecedents of Early Childhood Special Education (ECSE) program for the young children with deafness. After getting information at the antecedents phase, strengths, weaknesses and gaps in Early Childhood Special Education program will be identified and suggestions for the improvement of this program for young children with deafness will be given to Punjab Special Education Department, Pakistan.

Objectives of the Study

The study was conducted to achieve the following objectives:

1. To collect information about demographic characteristics of young children with deafness enrolled in Early Childhood Special Education (ECSE) program being run in Government Deaf and Defective Hearing Schools in Punjab.
2. To disseminate collected information about demographic characteristics of young children with deafness to Punjab Special Education Department and GDDHS for bridging gaps in the ECSE program.

Research Questions

Research questions based on the objectives of study were as follows:

- 1.1 What is the district wise enrolment of young children with deafness in GDDHS in Zone I?
- 1.2 What is the district wise enrolment of young children with deafness in GDDHS in Zone II?
- 1.3 What is the district wise enrolment of young children with deafness in GDDHS in Zone III?
- 1.4 What is the district wise enrolment of young children with deafness in GDDHS in Zone IV?
- 1.5 What is the strength of young children with deafness in GDDHS in all 4 zones on the basis of gender?
- 1.6 What is the class wise distribution of young children with deafness in GDDHS in four zones?
- 1.7 What is the zone wise distribution of young children with deafness on the basis of their age?
- 1.8 What is the zone wise distribution of young children with deafness on the basis of type of hearing loss?
- 1.9 What is the zone wise distribution of young children with deafness on the basis of degree of hearing loss?
- 1.10 What is the zone wise distribution of young children with deafness on the basis of use of hearing aids?
- 1.11 What is the zone wise distribution of young children with deafness with cochlear implant?
- 1.12 What is the zone wise distribution of young children with deafness on the basis of use of transport?
- 1.13 What is the zone wise distribution of young children with deafness on the basis of additional coaching at home?
- 1.14 What is the zone wise distribution of young children with deafness on the basis of number of siblings with deafness?
- 1.15 What is the zone wise distribution of young children with deafness having parents with or without deafness?
- 1.16 What is the zone wise distribution of young children with deafness on the basis of their fathers' qualification?
- 1.17 What is the zone wise distribution of young children with deafness on the basis of their mothers' qualification?

- 1.18 What is the zone wise distribution of young children with deafness on the basis of their fathers' profession?
- 1.19 What is the zone wise distribution of young children with deafness on the basis of their mothers' profession?
- 1.20 What is the zone wise distribution of young children with deafness on the basis of their fathers' monthly income?
- 1.21 What is the zone wise distribution of young children with deafness on the basis of their mothers' monthly income?
- 2.1 What steps Punjab Special Education Department should take to improve ECSE program for young children with deafness on the basis of collected information at the antecedents phase?
- 2.2 What measures Government Deaf and Defective Hearing Schools should take to improve ECSE program for young children with deafness in the light of recommendations and suggestions based on the demographic information collected at the antecedents phase.

The Framework of the Study

Taking into consideration the specific nature of the problem under investigation, there was a need to design a suitable evaluation study with a proper reporting format. To fulfil this purpose, many options were available, for example, Stufflebeam's decision making model, Stake's congruence model, or Scriven's goal free model. Keeping in view, the nature and objectives of the study, I selected Robert Stake's Countenance Model of evaluation.

Stake's model puts emphasis on similarity between what was anticipated to take place and was really observed to take place before, during, and after teaching. According to Stake, complete description and judgment of the program are two major operations, or countenances of an evaluation. Descriptive act stands for what was planned or what was really viewed to happen. Judgmental act means a benchmark which is employed in making judgments or the real judgments (Worthen & Sanders, 1987). His method focuses on the disparities between descriptive and judgemental acts considering their phase in an academic program: antecedent, transaction, and outcome (Popham, 1993). Antecedent is a state which is present before teaching that may be related to outcome. Transactions are consecutive activities or lively encounters forming the procedure of instruction. Outcomes are the end products, both planned and unplanned of the teaching process (Early Childhood Technical Assistance Centre, 2014; Popham, 1993; Stake, 1977).

Procedure of the Study

First of all, Punjab was divided into four zones (zone I, II, III, IV) by drawing one vertical and one horizontal line touching the central point of the map of the Punjab. Zone I included six schools located in district Dera Ghazi Khan (1), RajanPur (1), MuzafarGarh (1), Multan (3). There is no school in district Layyah. Zone II contained nine schools located in district Gujrat (1), Sargodha (1), Jhelum (1), Chakwal (1), Khushab (1), Mianwali (1), Jhang (1), Attock (1), Rawalpindi (1). There is no school in the districts of Mandi Bhauddin and Bhakar. Zone III included four schools located in district Vihari (1), Bahawalpur (1), Rahim Yar Khan (1), and Khanewal (1). There is no school in districts of Lodhran and Bahawalnagar. Zone IV consisted of 15 schools located in district Toba Take Singh (2), Sahiwal (1), Pakpatan (1), Okara (1), Faisalabad (3), Kasur (1), Lahore (3), Sheikhpura (1), Gujranwala (1), Sialkot (1). There is no deaf school in districts of Nankana, Hafizabad, and Narowal.

The population of study included all 34 GDDHS working in 31 districts of the Punjab, all 34 head teachers of these schools, and 6164 children with deafness enrolled in these schools. The sample of study included all 34 head teachers, and 989 young children with deafness enrolled in class K.G.1 and K.G.11 (ECSE program). A demographic information sheet for young children with deafness (YCWD) studying in GDDHS encompassing more than 30 items pertaining to child's age, gender, class, type and degree of hearing loss, number of siblings with and without disabilities, and socio-economic status of parents was prepared. After getting it validated by five experts in the field, necessary changes were made. After obtaining prior consent from the heads, the personal visits to all 34 GDDHS were made for collecting required information. It took almost three months in collecting data.

Data Analysis

Data were analysed using different statistical techniques depending on the nature of data and objectives using Statistical Package for Social Sciences (SPSS), version 20. Descriptive analysis was run on demographic information gathered about young children with deafness. Frequency distribution of demographic information about young children with deafness regarding their strength on the basis of four zones, gender, class, age, type of hearing loss, degree of hearing loss, use of hearing aids, cochlear implant, use of public and private transport, additional coaching at home, number of siblings with and without deafness, parents with and without deafness, parental qualifications, professions, and monthly income was run to derive conclusions about the antecedents of ECSE program for young children with deafness.

Discussion on Major Findings

At the antecedent phase, the results of demographic information sheet reflected that number of young children with deafness enrolled in 34 GDDHS in 31 districts of the Punjab province was 989. In Zone I (Dera Ghazi Khan, Rajan Pur, Muzzafar Garh, Multan, and Rahim Yar Khan) the number of young children with deafness was 167 which constituted 17% of the number of young children with deafness in all four zones of the Punjab. Zone II (Attock, Chakwal, Gujrat, Jhelum, Jhang, Khushab, Mianwali, Rawalpindi, and Sargodha) contained 249 (25%) young children with deafness. Zone III (Bahawalpur, Pakpattan, Sahiwal, Vehari) included 161 (16%) young children with deafness. Zone IV (Chiniot, Faisalabad, Gujranwala, Kasur, Lahore, Okara, Sheikhpura, Sialkot, Toba Tek Singh) contained 412 (42%) young children with deafness. This data reflects that average number of young children with deafness in one class in Zone I was 12; in Zone II, 14; in Zone III, 20; and in Zone IV was 17. After taking data from special education teachers, I came to know that only one teacher was deputed in one class irrespective of number of children. Secondly, there was no division of classes into sections in case of exceeding number of children. Research on deaf education stresses the restricted number of children with deafness in one class to maintaining quality of education and teaching to children with deafness considering their special educational needs (Hughes & Valle-Riestra, 2012).

In addition to this, the number of male young children with deafness was significantly greater than that of female young children with deafness (Zone I: males: 103 (61.7%), females : 64 (38.3%); Zone II: males: 171 (68.7%), females: 78 (31.3%); Zone III: males:103 (64%), females: 58 (36%); Zone IV: males: 246 (59.7%), females: 166 (40.3%). The overall percentage of male and female young children with deafness was 63% and 37% respectively. Saif and Bibi (2010) also reported the similar finding. It shows that parents were more inclined to send boys to schools than girls (Hameed, 2003). This finding is consistent with that of a doctoral study on early childhood education conducted by Ismail (1999), who found differences in the attitude of family, school, and society towards preschool girls and boys. She has thrown light on the gender biases of parents towards treating young boys and girls. She has reported that during interviewing and observing parents at homes, she came to know that parents were more ambitious and determined about the education and professional placement of boys than girls. This attitude is reflective of the general mindset of South Asian society where boys are given preference over girls right from the first day of their birth. The same is the case with boys and girls with deafness (Atta & Nosheen, 2013; Azhar & Arshad, 2014).

The age wise distribution of young children with deafness depicted that number of children in the age range of 7-9 years (48%) was greater than that of 4-6 years (45%), and 10 years and above (7%). It means that like parents of young children without deafness, parents of young children with deafness delayed their admission in schools (Azhar & Arshad, 2014) which might be due to late identification of the hearing loss, unawareness about the schools for deaf children (Yasin & Bashir, 2014), lack of resources, and poor socio-economic status (Ismail, 1999; Sattar & Latif, 2013; Yaseen & Bashir, 2014).

The distribution of young children with deafness on the basis of type of hearing loss showed that 91% children were having congenital, and only 9% were with acquired hearing loss. The main reason of this high percentage is the joint family system where inter family marriages are strongly recommended to strengthen the family bonds. During conducting interviews with parents on their satisfaction on and involvement in the education of their young children with deafness, I identified that majority of the parents had got kinship marriages. It is worth mentioning that mothers from Zone I (Dera Ghazi Khan, Muzaffar Garh, Multan, Rajan Pur, Rahim Yar Khan) told that in their districts there was no concept of getting married out of family. That is why all 167 young children with deafness enrolled in GDDHS in Zone I, were having congenital hearing loss.

Saif and Bibi (2010) conducted a research to find out intervention strategies used by parents of pre-school children with hearing impairment. A sample of parents of 40 children with hearing impairment of pre-school age (5-8years) was randomly selected from 10 schools (4 children from each school). A self developed and validated instrument containing three parts (part I: demographic information about parents; part II: 13 questions on four point Likert type scale; and part III: 15 close ended questions) was used for data collection. The major findings revealed that most of the parents (85%) declared inter family marriages as the reason of their child's disability (Khaliq, 2013).

Zone wise distribution of young children with deafness on the basis of degree of hearing loss exhibited that 553 (56%) young children with deafness were having profound degree of hearing loss. Saif and Bibi (2010) also reported 79% pre-school age children as having profound degree of hearing loss. A higher percentage of young children with deafness with severe degree of hearing loss (40%) was found in Zone IV. It is also surprising to note that some young children with mild hearing loss – 41 (4%), and moderate hearing loss – 119 (12%) were also enrolled in GDDHS in all four zones. On having discussions with the principals about this situation, I came to know that regular schools were reluctant (Bashir, 2009) in granting admissions to these children due to their hearing inability.

Atta and Nousheen (2013) threw light on the difficulties encountered by parents in getting their young children with deafness adjusted socially in inclusive schools. Bashir (2005), and Farooq (2012) discussed the reluctance of special education teachers of public and private sector about the inclusion of children with hearing impairment. In an inclusive setting, by using their residual hearing with the proper use of hearing aids, with the approval of management of regular schools, providing guidance to the class teacher, creating liaison with the regular schools, these children should be accommodated in regular set up (Gulfam & Noreen, 2014).

Zone wise distribution of young children with deafness on the basis of use of hearing aids presented an alarming information that only 75 (8%) out of 989 young children with deafness were using hearing aids. This finding is supported by a study conducted by Saif and Bibi (2010) who reported that parents of only 30% children told that their children were provided with hearing aids at the age of two years. Similarly, Akram and Bashir (2012) found that only 10% students with deafness were using hearing aids in schools. The importance of hearing aid in auditory training, speech and language development, in the development of reading, writing, and mathematical skills during early years of a child's life is evident from research (Rescorla, 2002; Yoshinaga-Itano & Sedey, 2000; Yoshinaga-Itano et al., 1998). In the absence of auditory stimulation, it is very difficult to teach young children with deafness learning utilization of residual hearing (Gulfam & Noreen, 2014), develop their speech (Khaliq & Ghafoor, 2008; Saeed & Nazir, 2014), literacy (Iqbal & Noureen, 2013), and mathematical skills (Khurshid & Zafar, 2013; Saif & Bibi, 2010).

The data depicted that 63 (6%) young children with deafness in the four zones had received cochlear implantation. We came to know from the principals and special education teachers that it was very difficult to provide them with required facilities and services due to overcrowded classrooms (Zulfiqar & Baber, 2010) and poor socio economic status of the families of children. Another study conducted by Khanum and Shafique (2010) explored impact of cochlear implant on the academic achievement of students with hearing impairment. They selected a sample of 37 young children with deafness (5-8 years old) belonging to families of high socio economic status, who had received cochlear implant, their parents, and teachers from nine cities of the Punjab, Pakistan. They used a self developed and validated questionnaire, and an interview schedule for data collection. Children were interviewed, and responses of parents and teachers were gathered on a questionnaire. These children were studying in inclusive English medium schools. The major findings revealed improved performance of children in the development of speech,

academics (Ameer & Bibi, 2014), socialization (Usman & Hameed, 2014), communication (Asif & Yousaf, 2014), auditory stimulation, and understanding speech without reading lips. The researchers recommended cochlear implant at an early age of 1-2 years with proper speech therapy, auditory training (Khan & Saeed, 2009), counselling by the audiologists regarding pre, intra, and post operative procedures before implantation, pre-service and in-service training to the teachers. The study conducted by Zulfiqar and Baber (2010) found the similar results.

The data taken on the provision of transport to young children with deafness reflected that Punjab Special Education Department was providing pick and drop facility to 80% young children with deafness who were enrolled in GDDHS. This is a great contribution of Government of the Punjab to increasing enrolment rate in these schools and helping low income parents who might have not been able to send their children to schools due to limited financial resources (Malik, Fatima, Nazir, & Nayab, 2015).

Zone wise distribution of young children with deafness on the basis of providing additional coaching at home exhibited that only 28% young children with deafness were receiving coaching at home by their parents, elder siblings, or relatives. The remaining 72% young children with deafness were without any coaching at home due to their parents being illiterate. Some of the parents informed during interviews that they had hired the services of private tutors. A significant research indicates that parental involvement plays an important role in the development and education of young children with deafness (Azhar & Arshad, 2014; Calderon & Greenberg, 1993; Calderon, Greenberg, & Kusche, 1991; Fatima, et al., 2014; Innocenti & Taylor, 1998; Leyser, 1985; Mumtaz, 2007; Saif & Bibi, 2010).

The data on number of siblings with deafness shows that 301 (30%) young children with deafness were having one, 14% two, and 5% were having three deaf siblings. The burden of disability on families adds to their challenges in rearing more than one child with deafness (Asif & Yousuf, 2014; Usman & Hameed, 2014).

Zone wise distribution of young children with deafness having parents with or without deafness reflects that parents of 95% young children with deafness were having normal hearing, 3% fathers, and 1% mothers were with deafness, and 2% young children with deafness were having both deaf parents (Yasin & Bashir, 2014). It was also found out by Moores (2001) and Bashir (2009) that most of the persons with deafness had parents with normal hearing.

The data taken on the qualifications of fathers of young children with deafness shows that 32% fathers in all four zones were illiterate. It is worth mentioning that the number of fathers with qualification of matriculation/S.S.C was greater (21.23%) than fathers with other qualifications. It may be due to the reason that the school education, here in Pakistan, ends with matriculation or on completion of 10th grade. Due to poor socio economic conditions, many students stop receiving formal education after completing matriculation/ S.S.C. The males go for earning to support himself and his family, and females get engaged in doing daily chores. During interviews with parents, we came to know that educated fathers were more interested in the education and development of their young children with deafness and many of them informed that after coming back from their jobs, they used to check the notebooks of their young children with deafness (Aasma & Javed (2012; Sarfraz & Khalid, 2012).

The data taken on mothers' qualification presents a gloomy picture on being 57% of them illiterate. Mothers having qualifications of primary, elementary, intermediate, graduation, and masters cover remaining 43% of their total strength. During interviews with mothers, we gathered that illiterate mothers were facing great difficulty in teaching to and dealing with their young children with deafness as compared to the mothers having some qualifications. Calderon and Greenberg (1993), and Calderon, Greenberg, and Kusche (1991) also explored that child's performance was significantly affected by maternal functioning and managing factors. Musselman and Kircaali-Iftar (1996) found many variables related to higher spoken language skills of children with deafness and, direct instruction by parents was one of them.

As far as the professions of parents of young children with deafness are concerned, majority of the fathers (74%) were labourers, workers, and shopkeepers by profession. The remaining 26% did fall under the categories of unemployed, drivers, government servants, businessmen, and teachers. Majority of mothers (93%) were housewives, and remaining 7% were working as maids, labourers, and teachers (Farooq, 2009).

Zone wise distribution of young children with deafness on the basis of their parents' monthly income shows that 35% fathers' monthly income was less than PKR 5000/- whereas 40% were taking PKR 6000-10000/- per month. The monthly income of the remaining 25% was between PKR 11000- more than 25000/-. So far as the monthly income of mothers was concerned, 93% were having no financial contribution to support their families. The remaining 7% mothers were earning between less than PKR 5000-15000/-. These figures throw light on the poor socio economic status of the families of young children with deafness (Aasma & Javed, 2012).

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