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BEHAVIORAL INTERACTION IN FAMILIES HAVING A CHILD WITH MENTAL RETARDATION

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ABSTRACT

The primary objective of the study is to determine the status of behavioral interaction among family members having a child with mental retardation, and hence to assess the relative contribution of each select aspect of the family on children's behavior. The list of mentally retarded children was collected from the three special education institutions by quota sampling. The total seventy parents were interviewed. After preparing the interview schedule, a pilot study was performed by taking 10 respondents. The findings suggested that the retarded child might not be normal in interaction with the siblings and other members. But nothing particular, indicating serious breakdown in family interaction pattern was traced on the basis of data available. It might be due to the fact that the retarded child enjoys the rightful status of the family member.

Key Words: Mental Retardation, Family, Behavioral Interaction, Siblings, Extended Family Members, Structured Interview.

1. INTRODUCTION

1.1 Home Influence

Parental attitude towards the child and towards their partner give early direction to later behavior, love, affection, and security in the house have a wholesome effect upon the child (Croot, Grant, Cooper, & Mathers, 2008). Rejection, lack of affection and un-predicable discipline are extremely harmful (Green, 2003). Also, absence of one parent or both may have an effect so profound that normal development may appear to be lower end socially unacceptable behavior towards others, is dependent in a large part upon 'the child' a home life (Masasa & Maure, 2005). In his early years a child who is deprived of normal experiences associated with home life, may show extreme retardation in many phases of his growth (Koller, Richardson, Katz, 1983).

Many studies indicate that children from home with strong social norms and discipline show better overall development in growth and behavior (Ellis & Adams, 2009). A home which sets standards of social emotional behavior too high for the child to meet, may contribute to his personality (Peterson, 2009). Home standards too strict may harm the child to such an extent that he becomes emotionally or socially maladjusted (Caparas, 2011).

1.2 Behavioral Interaction

In many studies, the behavioral interaction of the mentally retarded child has been described in relation to the members of the family other than parents (Beavers, Hampson, Hulgus, & Beavers, 1986). The relational narrower circle includes siblings, grand-parents and other elder members. The purpose of this query is to find out the supportive or rejective response of these family members to the unusual behavior of the retarded child. It is needless to emphasize that members of the family exert detrimental influence on the development of personality of younger members. But in case of a retarded child these relations become more decisive (Mink & Nihira, 1987).

The individual and the family are closely related. Although individual is endowed with certain biological and mental capacities and potentialities at birth, he soon becomes a social animal. While studying a person, we have to study his various mental, physical and temperamental characteristics,

which often offer a significant clue to the behavior of the person and the understanding of his role in the various groups of which he is a member. Boss (1988) points out, "An adequate study of the person must include the nature and extent of his participation in the manifold groups of which he is a member, his personal behavior pattern, his philosophy of life, his life organization". Individual's very self, his personality, his human nature, are all social products, derived from his complex interaction with the social groups which make up his expanding environment.

For a retarded child his whole social milieu is confined to his family only. His need for response is satisfied through the affection and the comradeship he receives in the family. The psycho-social influence of the family members on the child is very deep. There is an obvious reciprocal relationship between a retarded child and his family. The more favorable the relationship, the more stable, traceable and self-possessed the child will be, and the greater will be the happiness and stability of those who live with him (Crnic, Friedrich, & Greenberg, 1983). In turn, he will be more likely to gain the affection and support he needs to enhance his healthy adjustment.

Gallagher, Bechman & Cross (1983) discovered that presence or absence of personality problems in the retarded persons showed an exceedingly high relationship to the extent of parental acceptance, family cohesion and degree of overprotection, as measured in an index of family relations. Of the cases from families whose relationships were characterized as satisfactory, only one-fourth of the parents reported that their retarded children presented serious problems of adjustment such as stubbornness and overdependence. In contrast, of the families in which tension and rejection of the retarded child were marked, more than three-fourth of the retarded children was reported as presenting adjustment problems. They also found that acceptance or rejection of the retarded adults was related primarily to the general emotional adjustment of their parents and to their ethnic group.

There are reasons behind the apathy which has hampered research and treatment of the many handicapped persons. Some of the reasons or apathetic attitude are as follows:

- (i) **Cultural taboos:** Many families have felt deep shame at the presence of a retarded child. They have tried to hide him, deny his handicap, and place him in an institution without further family contact. Although these taboos are fast disappearing, their remnants remain surprisingly strong (Read, 2000).
- (ii) **The Notion of Incurability:** It was said that if a child developed into reasonably adequate adult, this proved that he had never been mentally retarded. This attitude which is fortunately less prevalent today has led to wide-spread pessimism and to half-hearted attempts at treatment (Dale, 1996).
- (iii) **Understaffed Institutions:** Institutions have customarily been understaffed, their professional personnel consisting mainly of over-worked staff members and devoted but untrained caretakers in day to day contact with the children (Dell Orto & Marinelli, 1995).

1.3 Behavior of the Mentally Retarded Child with Siblings

Byrne & Cunningham (1985) indicated that the presence of a retarded child adversely affects the development and happiness of his siblings. Most frequently these situations develop when the retarded siblings claim so much of the parents' attention that there is not enough left for other children (Cameron, Dobson, & Day, 1991). Very frequently, however, it is not the realistic demands made by the retarded child, but the irrational elements in the parents' behavior towards them which work the hardship on the non-handicapped children.

In Goudie, Havercamp, Jamieson & Sahr (2013) studies, no control groups were utilized but they gathered interesting data about the siblings of retarded children. They thought that for a number of reasons, the effect of retarded child on his siblings should be different from that on his parents. Solem, Christophersen & Martinussen (2011) conceived of the family as consisting of a number of three-person relationships (triads) each composed of the parents and one child. Each family would contain as many triads as there were children, the centre of organization, thus residing primarily in the parents. The effect of the retarded child under such conditions would be felt by the siblings primarily as it was

transmitted to them by the parents. The brothers and sisters would be less deeply affected by the arrest in the family's lifecycle, which is relevant to parental behavior and more deeply affected by short term immediate situational factors. His research data tended to substantiate those ideas.

In contrast to his findings concerning the marital integration of the parents, Farber discovered that the sex of the retarded child and the social status of the family made little difference in the adjustment of the normal siblings. The variable which seemed of greatest importance to the siblings was the degree of dependence of the retarded child, i.e., how much he was able or permitted to do for himself. The more dependent the child, compared with other retarded children of his age and the younger (also more dependent) he was, the more adverse was his effect on his siblings.

Problem of mentally retarded children has become very acute with increasing complexity of present industrial urban society. Recent research has pointed out increasingly to educational deprivation and other social cultural and economic factors as associated causes of mental retardation. In the present research it has been emphasized that an adequate social and cultural environment is essential for normal intellectual development of a child.

The problem of mental retardation involves a big social cost. Problems of such children are not only the problem of their own, but of their parents, family, peer-groups, institutions and ultimately for the whole of the society. Although in Pakistan researches have been conducted on other aspects of the problem, for example, its medical aspect, psychological aspect and psychiatric aspects, but almost no research has yet been conducted in Pakistan in social background.

2. METHODOLOGY

2.1 Participants

It is a descriptive study of involvement of family of mentally retarded children in the creation of conditions for mental retardation as a social problem. For the study the following centres have been selected for collection of samples of retarded children from Karachi City.

S. No	Name of the Institutions with Address	Number of Sample
1	Dewa Academy	35
2	Karsaz Special Education Centre	30
3	Quaideen Special Education Centre	10

These schools give special education and training to mentally retarded children. They also make arrangements for proper medical, psychological and psychiatric examinations of such children and help them in utilizing the existing treatment services available in the community. These schools also offer consulting services to all the applicants whether they get admission or not.

The list of mentally retarded children was collected from the above mentioned sources by quota sampling. Only those children, who were already admitted in the above mentioned institutions and were tested as retarded, were taken as samples of one group. The total seventy five parents were interviewed.

2.2 Instrument

Interview schedule has been used and information gathered by personal interview method. For knowing about the family conditions of mentally retarded children the schedule included information like (i) house address, (ii) parental name and age, (iii) occupation of parents, (iv) total income of the family, (v) type of family, (vi) mental health history of the family, (vii) untimely death of any member of the family, (viii) functional and dysfunctional achievement in the family, (ix) nature of treatment with the female members, (x) age of the child, (xi) sex of the child, (xii) nature of the child – aggressive, cooperative or jealous, (xiii) delinquency, (xiv) report of treatment about mental retardation of the child, (xv) how family is affected with the retardation of the child, and (xvi) which treatment resulted any improvement in the child.

In the present study the structured interview process is adopted because it is more efficient tool for research than an unstructured one. If the questions are predetermined and the extent to which the interviewer can explore the answers given, is restricted by definite rules, such interview is

called 'structured interview'. At the end of each printed schedule a blank page was left for the investigator to write down in detail about any important information about the family or about any individual member of the family which was not covered in the questionnaires.

After preparing the interview schedule, a pilot study was performed by taking 10 respondents. The purpose of the pilot study is quite distinct from that of the main survey. The pilot survey has been designed primarily as an exercise in methods of asking questions and in recording answers.

The pilot study revealed some of the difficulties and with the result few questions were modified. The investigator has to face some difficulty to make the respondents agree in answering questions. But in most of the cases the investigator received much cooperation by the respondents. In some cases the respondents became so much familiar with the investigator that they started seeking advice from the investigator for their family problems. Investigator has also tried her level best to help them as much as possible for solving their family problems. Interviewer personally has met the respondents usually at their homes.

2.3 Tabulation and Analysis of Data

Collected data were scrutinized and edited. Tabulation work was then started. For analyzing and representing the data, it was decided to rely upon the frequency tables. Tabulation was done in such a way so that the data revealed internal logic and order. In the tables representing the frequency distribution of different variables, the method for measuring the limits of the class intervals in a frequency distribution, is of exclusive type. This method is used in describing the tables of the variables of occupation and parental age only and the rest of the frequency tables are of simple type.

3. FINDINGS

Normally, a handicapped child is a problem to the family in matters of discipline and maintenance of cohesive family life and it often creates repercussions within the family, they are given expressions to the members of the family in petty things as refusal to carry out orders, by going astray, sometimes they also become violent with other children. All these are the various expressions of the feelings of the other members of

the family. To know such feelings the investigator sought some replies of the questions and results are presented in Table-1.

Table 1
Behavior of the retarded children upsetting the family life

Nature of Behavior Disorder	Number of Retarded Children	Percentage
Refusal to obey for constructive work	32	42.6
Going astray	9	12.0
Creating behavioral disorder with household things	34	45.4
Total	75	100.00

The table indicates that generally the expressions given by members of the family were that the retarded child create disturbance in the family by behavioral disorders like disturbing and destroying things and by showing disrespectful attitudes created probably by their lower level of intelligence and understanding or otherwise behaving in an unbefitting manner. Such disorders in behavior especially with household things cause repercussions in family life and they are highest in the samples analyzed. 45.4% have reacted for suggesting such disorders to be the reason for upsetting the routine of the family life.

About 42.6% expressed for suggesting that such children are unable to follow the instructions and they do not obey for the constructive work. Obviously for reasons of their being handicapped in their mental acumen for such pursuits expected from and judged by the standard of a normal child only 12% have said that such children go astray.

Table 2

Retarded children's behavior orientation to their younger

Behavior orientation	Number of children	Percentage
Orientation of love	58	77.33
Shows no love	17	22.67
Total	75	100.00

The parents were asked to let the investigator know about retarded child's love and affection for his siblings. It was noted that the particular child was affectionate and love oriented towards them as evident from the above table. Love orientation has been noticed among 77.33% and those who do not express love for their siblings are 22.67%. It shows the effect influence of typical Pakistani family socialization pattern on the retarded child. Because of his mental retardation the retarded child is not a valued member of the family. He is not encouraged to express hostility towards his siblings. Moreover, he is dependent in play and other necessities of life on his normal siblings. These factors might condition him to a genuine or assumed behavior of love and sympathy. Those who could not check their hostility they have expressed open hostility or cold behavior to their siblings. Their number is not insignificant as they show a major trend, an important trend, in sibling orientation. A hostile behavior of mentally retarded child is a source of constant anxiety in the members of the family.

Table 3

Fear of elders

Retarded children	Number	Percentage
Have fear for elders	52	69.33
Have no fear for elders	23	30.67
Total	75	100.00

Elders of the family are usually very much critical and conscious of the behavior of the retarded child. About 59 of the parents are found inflicting

severe punishment and about 20 rarely punish their children for the lapses in behavior of the retarded child. The retarded child may have the impression of being less wanted and consciously observed, and that is why authority of the elders is repressive for 69.33%. Only 30.67% are not so much afraid of the authority of the elders. Though fearful regard f or the elders is a traditional behavior pattern of the younger members in an Pakistani family but such a large number of retarded children's being afraid of their elders is a significant phenomenon. It can be fairly concluded that retarded children have no normal rapport with the elders. This might be responsible for further deterioration in their adjusted behavior.

Table 4

Retarded children quarrel with younger members of the family

Frequency of quarrelling	Number of retarded children	Percentage
Frequently	23	30.66
Occasionally	38	50.67
Rarely	14	18.67

As evident from the above table the parents noticed that their retarded children are usually not properly adjusted in sibling relations. It has been reported that 30.66% resort to quarrelling very frequently and 50.67% quarrel occasionally. Only 18.67% are quite retarded children. These figures indicate an adjusted behavior trend of the retarded children under study. So, the data bring to notice that the majority of the retarded children are neither severely quarrelsome nor severely hostile but the majority of them are in constant state of fear of their elders. Fear might be associative factor in non-adjusted behavior pattern of the retarded children.

The behavior of siblings in matter of withdrawing from such retarded child or, such mentally retarded child being disinterested with other siblings is a very important phenomenon of family life of such children. In this study it has been found that most of the children have shown no inclination for rejecting attitude both from the side of the siblings and

from the side of the mentally retarded children. But in the matter of sharing of play things the mentally retarded children have shown a negative attitude. Obviously because a mentally retarded child is undeveloped in mental age than compared to his chronological age behave like a boy of smaller chronological age of normal group and in the matter of ay things such children have more affection and not easily ready to part with it and share with other children. Otherwise the mentally retarded children in this study in majority were not even found to be jealous with other children. The following table reveals the above mentioned information.

Table 5
Retarded children's withdrawal from the siblings

Tendency	Number of retarded children	Percentage
To withdraw	18	24
Not to withdraw	57	76
Total	75	100.00

Table-5 shows that only 24% of the mentally retarded children want to keep themselves isolated and do not like the association of other siblings, whereas 76% of the mentally retarded children are found to be quite inclined for having associations with their siblings. It is quite possible that in cases of the children of this group, some who were not found to be favorably inclined for such associations, the behavior might have been due to the result of their families taking those children subnormal, discard them and such children have a reciprocal development of moroseness in themselves and they are afraid of mixing up with other children or siblings. The table reveals that most of the mentally retarded children in this study have a positive tendency of having associations with their other siblings.

Table 6
Rejection of retarded children by the normal siblings

Rejecting attitude	Number of retarded children rejected	Percentage
Frequently	41	54.67
Occasionally	4	5.33
Rarely	30	40.00
Total	75	100.00

In cases of other siblings it was found that majority is not in favor of keeping association with their mentally retarded brother or sister. The result analyzed shows that 54.67% are rarely inclined to be friendly with such child and 5.33% are occasionally found to be friendly with such children and only 40% replied positively for such an inclination. It is quite possible that the normal siblings of the family feel a sort of superiority complex and hence keep themselves aloof from such retarded children and they have little flow of fraternal love for such handicapped numbers of their families.

Table 7
The retarded children's attitude of sharing play materials with normal siblings

Attitude of sharing play materials	Number of retarded children	Percentage
Frequently share	27	36.00
Rarely share	44	58.67
Occasionally share	4	5.33
Total	75	100.00

Majority of the retarded children, i.e., 58.67% are rarely in favor of sharing the play materials with their siblings. As revealed earlier, it was found that majority of normal children were not in favor of keeping association with the handicapped child, it may be that as a reciprocal introversive moroseness these children feel, for reasons of expressions of superiority by other siblings, they create their own world and they are not favorably inclined to share their play things. This temperamental seclusion created in such handicapped children makes them isolated mentally and they have their own way of satisfying their whims of isolation. They seem to be hardly willing to share their world with other siblings and in case of such other children trying to come into their world they seek to secure a way by refusing even to share their own play things. It is a typical chain of isolation created by both ends - one by rejection and other by feeling of isolation.

In the present research work it has been found that majority of mentally retarded children belong to joint families and hence it creates a necessity for studying the behavior of other members of joint families towards the retarded child. In nuclear families it is the parents or the siblings who have the only role to play for the growth and social behavior of the child but in joint families other members like grand-mother, grand-father, uncle, aunt, all have important roles to play and their behavior also may be a source of study for coming to a conclusion about family behavior towards the child. The table below gives the data regarding the mode of behavior of such family members with the mentally retarded children.

Table 8

Behavior of numbers of the family towards the mentally retarded child

Behavior of the members of the family	Number of mentally retarded children	Percentage
Protective	26	34.70
Apathetic	21	28.00
Indulging behavior	17	22.70
Punitive	11	14.60
Total	75	100.00

The above findings reveal that 28% of members of the families of retarded children are apathetic towards their children and 14.6% took punitive attitude, whereas the behavior of 34.7% was protective with the retarded children; 22.7% were found indulging in retarded children's affairs. It might lead to either over protectiveness or aggressive and punitive.

DISCUSSION

In this study, the interaction of the retarded child with members of the family other than parents and vice versa was empirically described. Certain aspects of family interaction, very common in nature, were taken as indicators of the mode of interaction. The purpose was to find out how far the retarded child is integrated with others and how others are supportive or rejective of his behavior. This could have brought to the notice the severe rejective or protective patterns of behavior toward the retarded child. Also the retarded child being mentally retarded might not be normal in interaction with the siblings and other members. But nothing particular, indicating serious breakdown in family interaction pattern was traced on the basis of data available. It might be due to the fact that the retarded child enjoys the rightful status of the family member. The senior members were more protective than punitive.

The siblings of the retarded child have shown a little higher tendency of rejecting the retarded child in play. There is nothing unusual among the children not associating with this child who might be non-cooperative in playing or sometimes destructive of play materials. This rejection seems to be situational concerning children's play but on the whole the siblings also have normal affectionate behavior interaction with the retarded child. The said child is valued by his or her sibling as a valued member of the family. On the basis of data we can confirm only this much that the retarded child is not severely rejected by the siblings and members other than the parents.

The retarded child being unfortunate is a misfortune for the family as well. This fact is accepted and dealt within the family in a usual way. But it is also a fact that the child does receive extraordinary love or affectionate response by the members of the family.

In the present complex structure of the society in an urban context people feel that joint family is a curse. Yet in most cases of retarded children they

belong to joint families. Almost each sample of this research work belongs to such joint families where tension, quarrels, separation, rejection, step relations and unwanted exist. Lower socio-economic conditions associated with disgusted attitude of parents who feel that they are not satisfied with their livelihood, they think that their intelligence being prostituted, they are not in a proper psychological frame of mind to enjoy the social relationship which his family brings. There arises a conflict between his ideals and practices which may easily be a source of friction.

In such joint families when marital adjustment between the parents is analyzed the findings project that the romantic expectations of the partners with which they entered marriage were frustrated by the unromantic realities of the marital situation. The marital adjustment between the parents is of profound significance in determining their off-springs attitudes and for their mental and social development. This maladjusted marital life in the long run creates unwantedness, rejection and maternal or fraternal deprivation.

Although in the present work, parents of retarded children have been found to believe that their children should get proper medical care but they are quite irregular in attending such clinics. They are rather negligent towards visiting clinics for treatment of their handicapped children.

Hence it can be concluded that the findings suggested that such handicapped children belong to handicapped families. The new experiences, new stimuli, and new associations - the child meets within such family environment and in its mental disbalanced and antisocial personality development. The need for recognition is satisfied through the role the child plays in the family, the attention he secures, the status he occupies, the approvals he gets therein, which have been seldom found in such families.

Although most of the family conditions leading to mental retardation is fragmentary, speculative and difficult to interpret, still it seems abundantly clear that some circumstances are more favorable than others, that while most of the children grow up in situations which are on the whole conducive to their intellectual growth, others like in situations which retard or stop development in this sphere.

The present research from many directions is casting light into the deep shadows of the present complex problem of mental retardation. This research from field work surveys and other sources, strongly suggests that a variety of complex and interrelated factors in this category are definitely associated with the prevalence of mental retardation.

Whenever the causes, the failure of mentally retarded individuals to adjust successfully to social and economic conditions of our society constitutes a severe and growing handicap for the individual for his family and for the society. Moreover, as our competitive society becomes more complex and fast moving, the demands for intellectual capacity and for adaptability increase. Thus, in an age of automation individuals with minimal skills and abilities become doubly handicapped. Not only do they face an increasingly competitive society, but hampered as they are, they must keep pace with people of increasingly higher capacities. Thus they become more easily submerged by the vicissitudes which others can surmount. So, much of the long road to full understanding of the complex phenomena involved, lies ahead and indeed is not clearly defined as to the directions it may lead.

From these basic considerations the fundamental strategy of mental retardation takes shape. Because its causes are complex, the battle against mental retardation will have to be "broad spectrum" in character. We must act as many fronts against the root problems in the social economic and cultural environment which nourish the specific cause and seem to have a major and direct causative influence of their own.

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A STUDY OF LEISURE TIME ACTIVITIES OF STUDENTS WITH HEARING IMPAIRMENT

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ABSTRACT

The present study was conducted to identify the leisure time activities of students with hearing impairment. Researchers made a survey of special schools, NGO's and special education centers of two cities of Pakistan; Lahore and Sahiwal. Population of the study consisted of students with hearing impairment. A sample of 60 students with hearing impairment was randomly selected from six special education schools of Lahore and Sahiwal cities. 40 hearing impaired students were selected from Lahore city and 20 students were selected from Sahiwal. 50% of the respondents were male and 50% of respondents were female students with hearing impairment from secondary to graduation (8th to 14th). Self developed and validated questionnaire was used to elicit responses of students with hearing impairment. The respondents were required to respond on four point scale (ranging from 1 to 4 i.e. 4=yes, 3= no, 2=often, 1=sometimes). The reliability of questionnaire was .87 (Cronbach alpha). Frequencies of responses along with percentage were calculated. The results indicated that majority of the students with hearing impairment preferred to use technology (Face book, internet browsing, Skype, Picasa, mobile phone, watch T.V dramas, movies, different programs) in their leisure time.

Key words: Activities, Recreation, Technology, Social Media, Leisure Time, Hearing Impairment.

1. INTRODUCTION

Leisure time is a time available for ease and relaxation apart from obligation of work. Leisure time may be defined as the spare time which anybody gets after his bread and butter activities are over (Dumazedier, 1998). According to Priest (1999) leisure experience is defined by two criteria: a) is entered voluntarily and of free choice; and b) is intrinsically motivating in and of its own merit. According to Carter, Van Andel and Robb (2003) the major role of leisure time activities is provision of therapeutic recreation, because it significantly contributes to any person's quality of life. Leisure time provides any individual a sense of freedom, satisfaction and joy. Leisure time has to be recognized as an important context for the child and adolescent development. An organized leisure time activity is beneficial for the young people as it make them busy in positive activities, increased peer interaction and keeps them away from the anti-social behavior (Cardwell and Darling, 1999).

The leisure time activities may be divided in to active and passive leisure time activities. Active leisure activities involve the exertion of physical or mental energy. Some active leisure activities involve almost no physical activity, but do require a substantial mental effort such as playing chess or snooker and/or painting a picture etc. Active leisure and recreation overlaps significantly. Passive leisure activities are those in which a person does not exert any significant energy such going to cinema, watching T.V etc.

Research has demonstrated that regular participation in the leisure time activities has physical and psychological benefits including mental health, economic development, family bonding and environmental awareness. Physical benefits of exercise may include strengthening of our bodies, and making them more resistant to injury etc. Whereas, playing sports allow us to learn teamwork, sportsman spirit skills, while being physically active. These skills can help us later in our work as we will be better able to cope with others and their problems.

Leisure benefits not only to the individuals, but also society as a whole. Leisure provides an opportunity to examine personals values, to focus on what is important to you. It gives you the balance you need to deal with your non leisure activities. Leisure time activities relief you from stress and boredom. These benefits are very important for the personality

development particularly for the persons with disabilities (Beaton, 2003; Maltis & Bar-Or, 2003; Sutherland & Anderson, 2003). Participation in sports and other recreational activities by persons with disabilities particularly persons with sensory impairments contributes to improved social effectiveness and sense of control in their lives and enhance social integration (Blinde & Taub, 1999). It also increase life expectancy of persons involved in leisure time activities.

Persons with hearing impairment constitute a very high proportion of persons with disabilities. Every person enjoys his /her free time in a different way. Like hearing persons, children with hearing impairment spend their leisure time in different ways. Students with hearing impairment are intellectually normal but due to problem in hearing, they encounter language problems especially in spoken language. It is highlighted by the literature that their leisure time activities include both indoor and outdoor activities. However majority of them hesitate to engage in those activities to spend their free time which involves language e.g., reading books, news papers, journals, story books, fictions etc.

Keeping in view the importance of leisure time activities in the light of above discussion, the present study will highlight the leisure time activities of the students with hearing impairment as no research has been conducted and documented on this topic in Pakistan.

2. METHODOLOGY

The population of the study consisted of all students with hearing impairment (SWHI) studying in special schools, NGO's and special education centers of two cities of Pakistan, Lahore and Sahiwal. A sample of 60 students with hearing impairment was randomly selected from six special schools, NGO's and special education centers of Lahore and Sahiwal cities (40 hearing impaired students were selected from Lahore city and 20 students were selected from Sahiwal). 50% of respondents were male students and 50% of respondents were female students. The age of respondents ranged from 13 to 24 years. The respondents' grade level was from secondary to graduation (8th to 14th).

After reviewing the literature the researchers developed a questionnaire as an instrument to collect the data. The questionnaire consisted of two parts. The first part of questionnaire consisted of demographic information

(e.g.name, gender, age, class, level of hearing loss city/district and institution). The second part consisted of 28 close ended items as a description of leisure time activities of students with hearing impairment. The respondents were required to respond on four point scale (ranging from 1 to 4 i.e. 4=yes, 3= no, 2=often, 1=sometimes). The content validity of the questionnaire was estimated with the help of experts related to field of special education. The reliability of questionnaire developed for students with hearing impairment was .87, estimated with the help of (Cronbach alpha).

Initially the students with hearing impairment studying in different special schools of Lahore and Sahiwal were identified with the help of Directorate of Special Education by taking a list of all the special schools, NGO's and special education centers of province Punjab. The researchers personally visited the respective six special schools to collect the data. For valid responses of students, instrument was explained in sign language to the students with hearing impair by the researchers.

3. FINDINGS

Frequency distribution and independent sample t-test were run to analyze the data. The analyzed data is presented in the following tables.

Table No .1
Frequency Distribution of the Response

Sr. No.	Statement Items on Leisure Time Activities	Yes		No		Often		Some Times	
		F	%	F	%	F	%	F	%
1.	You like to use Face book on internet?	25	41.7	22	36.7	4	6.7	9	15.0
2.	You like to listen music?	34	56.7	15	25.0	5	8.3	6	10.0
3.	You like to enjoy music on computer/T.V?	34	56.7	18	30.0	3	5.0	5	8.3
4.	You like to use Skype on internet.	27	45.0	16	26.7	6	10.0	11	18.3
5.	You like to watch films & dramas on T.V/ computer?	25	41.7	22	36.7	5	8.3	8	13.3
6.	You like to do graphic designing on computer?	27	45.0	17	28.3	3	5.0	13	21.7
7.	You like to edit your pictures through Picasa software?	36	60.0	12	20.0	6	10.0	6	10.0
8.	You like to go on long drive with yours friends/family?	18	30.0	19	31.7	3	5.0	20	33.3
9.	You like to go on picnic with yours friends/family?	34	56.7	9	15.0	8	13.3	9	15.0
10.	You like hostelling with your friends/family?	35	58.3	3	5.0	10	16.7	12	20.0
11.	You like to do any kind of art work?	18	30.0	27	45.0	8	13.3	7	11.7
12.	You like to play games on digital devices e.g., mobile phones, tablets etc.?	32	53.3	11	18.3	8	13.3	9	15.0
13.	You like sketching?	35	58.3	5	8.3	9	15.0	11	18.3
14.	You like mobile messaging with your friends?	48	80.0	6	10.0	1	1.7	5	8.3
15.	You like to play Lido?	24	40.0	22	36.7	7	11.7	7	11.7
16.	You like sewing/ embroidery work (girls) or play cricket with neighbors?	14	23.3	33	55.5	10	16.7	3	5.0
17.	You like to go Jim/parks?	32	53.3	17	28.3	6	10.0	5	8.3
18.	You like to read news papers/ magazines (fashion magazines)?	34	56.7	9	15.0	6	10.0	11	18.3
19.	You like to read books?	15	25.0	25	41.7	5	8.3	15	25.0
20.	You like to write poetry/diary?	15	25.0	24	40.0	6	10.0	15	25.0
21.	You like to watch different programs on T.V?	30	50.0	19	31.7	4	6.7	7	11.7
22.	You like to do shopping?	35	58.3	8	13.3	11	18.3	6	10.0
23.	You like dating?	13	21.7	43	71.7	3	5.0	1	1.7
24.	You like to do art work?	26	43.3	13	21.7	10	16.7	11	18.3
25.	You like to do web browsing?	28	46.7	7	11.7	13	21.7	12	20.0
26.	You like to play chess?	12	20.0	32	53.3	2	3.3	14	23.3
27.	You like to write on different topics?	20	33.3	24	40.0	6	10.0	10	16.7
28.	You like to do gardening?	20	33.3	19	31.7	9	15.0	12	20.0

Table No .2
Mean score analysis performed on the basis of indoor, outdoor and technology based leisure time activities.

Major interests	N	Minimum	Maximum	Mean	Std. Deviation
Technology	60	19.00	44.00	34.6000	5.44370
Indoor	60	17.00	40.00	29.5833	5.82307
Outdoor	60	12.00	28.00	20.9500	4.56377

The above table show that majority of the respondents (students with hearing impairment) prefer to use technology in their leisure time activities (34.6) as compared to other indoor and outdoor activities.

Table No .3
An independent sample t-test performed on the basis of gender and different leisure time activities.

Gender of respondent		N	Mean	Std. Deviation	Std. Error Mean	F	Sig(2 Tailed)
	Male	30	89.8333	15.26566	2.78711	1.507	.000
	Female	30	80.4333	10.26102	1.87340		

The result of t-test indicates that there is a significant difference in the leisure time activities of students with hearing impairment on the basis of their gender (male =89.83, female=80.43).

Table No .4
ANOVA comparing the leisure time activities of students with hearing impairment on the basis of grades

Total score	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	5177.542	6	862.924	7.674	.000
Within Groups	5959.391	53	112.441		
Total	11136.933	59			

The result of ANOVA indicates that there is significant difference among the mean of their groups based on the total scores. The ($F=7.674$, $Sig=0.00$) value is significant. It shows that a difference is present in the leisure time activities of students having different age groups.

The analysis of data has shown that like hearing children, children with hearing impairment spend their leisure time by engaging themselves in different leisure time activities. They enjoy almost equally both indoor and outdoor leisure time activities. However most of them use digital devices to spend their leisure time.

The study revealed that majority of students with hearing impairment use computer technology to spend their leisure time. For example, they use computer technology to become a member of social media, internet browsing to search movies, cartoons, games and use of Skype, Picasa in their leisure time. Moreover, use of latest mobile phones (to download and play games, to send text and picture messages to their friends/family members) has also been found as a frequently used leisure time activity of students with hearing impairment. Some other leisure time activities of SWHI were watching T.V (dramas, movies and different programs).

The results of this study has indicated some other leisure time activities of students with hearing impairment i.e., go to long drive with their friends, enjoying picnic with their friends, hoteling with family and friends, news paper reading, reading of magazines, Jim joining; doing art work e.g., color painting sketching, drawing, etc.; playing different games like chess, cricket etc.

A difference in leisure time activities of male and female students with hearing impairment has also been highlighted by this research. For example majority of the girls like to spend their leisure time by engaging them in cooking, embroidery work, listening to music with the use of head phone (students with mild hearing loss), visiting their friends, gardening, shopping and by reading fashion magazines. Whereas, the male SWHI mostly like to go to Jim, play cricket and chess with their neighbors, going for hotelling and using ICT and by engaging in social media to spend their leisure time. However, book reading has not been found as frequently used leisure time activity by the students with hearing impairment.

4. DISCUSSION

Hearing impairment is a very challenging impairment. In most of the persons, this impairment is not visible. Some persons with hearing impairment have profound and severe hearing impairment whereas some have mild to moderate hearing impairment (Moore, 2001).

Although the hearing impairment resulted in limited social functioning but the persons with hearing impairment have same wants and needs as the hearing persons. Recreation is a need of every individual to keep oneself fresh and free from stress and boredom. Moreover, leisure time activities play a crucial role in the lives of individuals with hearing impairment as the quality of leisure time activities significantly contributes to the quality of life. This study was conducted to explore the leisure time activities of persons with hearing impairment belonging to different age groups and institutions.

The study has reflected that major sources of hearing impaired students to entertain themselves were the usage of technology like usage of (Facebook, internet browsing, Skype, Picasa, mobile phone) in leisure time. Frequent use of computer technology along with internet has been found as central to spend leisure time. Many studies have shown that persons with hearing impairment utilize a variety of computer technologies to spend their free time because it provides them with improved accessibility in numerous environments. This finding is in conformity with Bryce (2001) who reported that use of computer and other communication technology in leisure time has been markedly increased since last ten years. He also expresses his view that there has always been a relationship between technology and leisure. Some of the familiar activities of entertainment of hearing impaired students to hang with their friends (long drive with their friends, picnic with their friends, hoteling with family and friends) in leisure time.

The study has showed that most of the hearing impaired students do not spend their leisure time in either writing something e.g. diary or short story and reading literary books. It is due to poor literacy skills of students with hearing impairment. Many research studies have shown language development of students with hearing impairment due to hearing loss (Paul, 2002). That is why most of them had not preferred book reading and writing in their leisure time.

A significant difference in leisure time activities of students with hearing impairment on the basis of gender have also been found. The study have revealed that most of the students (girls) do cooking, stitching, reading fashion magazine, embroidery, shopping and by listening music. These results are inconformity with the studies conducted by BoUa, P., Dawson, D., & Harrington, M. (1991) and Bialeschki, & Henderson, (1986).

5. RECOMMENDATIONS

On the basis of the conclusion of the study following recommendation are made:

1. Teacher should develop literacy skills in the students with hearing impairment, so they can use literacy sources (e.g., literary books) for their entertainment in their leisure time.
2. Government institutions may organize events in which indoor games for hearing impaired persons are promoted in schools as well as in homes.
3. There should be sign language story and literacy books in libraries of schools of hearing impaired students so they can read story books in their leisure time.
4. Further study should be conducted on the same topic with large sample.

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PROFESSIONAL PRACTICES AND PERSPECTIVES IN PSYCHOLOGICAL MANAGEMENT OF DISABILITY AND EFFECTIVENESS OF MEASURES

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ABSTRACT

Managing the issues of disability in all forms has always been the concern of most researchers and experts associated with special education and health care. This paper also explores how disability issues and its effective management can lead to a better community and individual around the globe. The issues are highlighted in terms of infrastructure support, technical resources and funds on one hand and on the other are the issues of effective assessment, fund utilization, planning to prevent the disability around the human race and other related issues. The paper examines the psychological management of two major types of disabilities: physical and mental and suggests some of the ways through which disability in any regard can be reduced to an acceptable size in nature, complexity and volume in terms of expenditures on it. This discussion unfolds the required strategic changes in professional practice paradigms of experts in special education particularly with regards to human disability in various contexts. Critical review of experts and trainers reveals that a case with mild or severe disability must be dealt with care and vigilance so the effect of assessment and treatment are achieved per the professionally prescribed protocols. An individual with required treatment and assessment of the disability must also be ensured that he or she is in safe hands for the betterment of their life practices and expectations that they may have from professional in the field.

Key words: Disability, Professional Practices, Psychological Management, effectiveness, Measurement.

DEFINING INTELLECTUAL DISABILITIES

By definition, an intellectual disability prevents an individual from performing tasks that are naturally embedded in all individuals such as thinking, deciding, planning to perform a task, analyzing a situation, feeling towards an experience and undergoing a phenomenon. The intellectually disabled in the study meets the accompanying qualification criteria as: a) A case with a deep or severe intellectual deficiency has professional working that is 2 or more standard deviations beneath the mean on an exclusively controlled level on appraisal instrument of professional working, and has restrictions of comparative degree in versatile working in no less than two expertise territories proper to the case's age. b) A case with a moderate to significant professional deficiency has professional working that is 3 or more standard deviations beneath the mean on an independently-managed level appraisal instrument of professional working, and has impediments of comparative degree in versatile working in no less than two expertise ranges suitable to the case's age.

IDENTIFICATION AND ASSESSMENT

A case with a professional handicap will regularly be recognized before entering the educational system. For cases with a transparent deficiency, be that as it may, troubles with versatile conduct might not have been already recorded. The American Relationship on Scholarly and Formative Incapacities, characterizes versatile conduct as three sorts of aptitudes:

- Reasonable aptitudes dialect and education; cash, time, and number ideas; and self-course
- Social aptitudes interpersonal aptitudes, social obligation, self-regard, naïve, guilelessness (i.e., carefulness), social critical thinking, and the capacity to take after standards, obey laws, and abstain from being exploited.
- Pragmatic aptitudes exercises of everyday living (individual consideration), word related abilities, social insurance, travel/transportation, plans/schedules, security, utilization of cash, utilization of the phone.

Carbine & Schwartz (1987) suggest the similar ways to manage disability in a professional context. Their observations critically illuminate how

work performance and cost incurred as a result of disability can be reduced and made satisfactory by including the potentially skilled disable workforce. This parameter of performance and managing of disability as a model can work in most cases in Pakistan where disable personnel are restricted on jobs and not encouraged to participate in real life issues willingly.

A psycho-instructive evaluation will be utilized to decide a disable's level of working and ought to be founded on an assortment of measures of professional capacity and versatile conduct, and in addition data from the family and, where accessible, other administration suppliers. Instruments, for example, the most current modification of the *Vineland Adaptive Behavior Scales*, *The Scales of Independent Behavior*, or the *Adaptive Behavior Assessment System* ought to be utilized as a part of the appraisal of an individual's versatile conduct. Dyck (2006) explains how effective disability management can be brought from theory into practice in a practicable sense. The research focuses on disability management & effectiveness: theory, strategy & industry practice.

The most regularly utilized tests as a part of surveying professional capacity are the most current amendments of the Stanford-Binet and the Wechsler Knowledge scales. Akabas, Gates, & Galvin (1992) explain how employers see the effective management of disability and suggest several ways to reduce the recurring cost of disability in an organization. They are of the view that disability is natural and the way to control any natural handicap is differently handled than assumed parameters of controlling this.

It must be noticed that each instrument has estimation mistake of around five focuses, so a case might be related to a gentle professional deficiency with a general subjective score as high as 75 when there are noteworthy shortfalls in versatile working. However; no critical impedances in two or more versatile aptitude zones would be recognized in this classification. A case might be related to a moderate professional deficiency with a general subjective score as high as 59 when there are noteworthy hindrances in versatile working, yet would not be related to a moderate professional deficiency if scores in two or more versatile expertise territories, proper to the case's age, are not at a comparative level.

The Inter-Ministerial Protocol for Transition Planning for Youth with Special Needs requires and Community Living British Columbia (CLBC) expects that school clinicians will, by the year in which a case turns 16, either direct a present psycho-instructive evaluation or give affirmation of a formative deficiency. The psycho-instructive appraisal or affirmation must hold fast to the symptomatic criteria of the Diagnostic and Statistical Manual of Mental Disorders.

PLANNING AND IMPLEMENTATION WITH MILD INTELLECTUAL DISABILITY

Most cases with gentle professional deficiency advantage from and may gain best from being with age peers, yet for the most part likewise require extra mediation. As they continue through grade school, they need to determine any alterations or adjustments to branches of knowledge or courses, utilization of exceptional materials, and the measures of advancement. The accentuation is on planning and helping cases achieve their own objectives and their most abnormal amount of working. Guardians must be given the chance to take interest in the planning and arrangement mechanism and to the extent that they are skilled.

While individual needs may contrast, numerous cases with this type of disability with smooth educated inabilities will require particular assistance for achieving pedagogic and professionally acceptable awareness of skills and sets of knowledge, personal freedom, social responsibilities and expected social tasks, life-long learning dynamics and in addition with thinking aptitudes, a sharp memory to recall events, critical thought process and a sound framework of concept along with required attitude towards the issues and challenges.

The more established the case of an individual with disability, the more noticeable the requirement for instructional goals and objectives. At the fundamental stage, a case with the disability with a transparent helplessness might seek the opportunity to have an alternative to get to an able variety of instructional and psycho-social encounters both inside the organization such as school and in the age-group he or she belongs to. For some under-observed cases, proceeded with investment in scholastic attainments, with adjustments and backing where required, is both sensible and attractive. For various cases, provision of collective harmony and

work experience/work-related chances to do well are commonly proving to be very crucial and strong.

PLANNING AND IMPLEMENTATION WITH MODERATE TO PROFOUND INTELLECTUAL DISABILITY

Clinicians in adaptive behaviour studies are predominantly interested to work on cases with moderate to profound disabilities in that such cases have significant learning handicaps that have identified obvious learning qualities. They need help and support in the advancement of professional attitudes, relational potential, psychological aptitudes, acquired and refined overall motor and physical skills, self-care, life abilities and an ability to mix up and live with common people. For the most part, a case with this level of refined scholastic background is additionally deficient in social and passionate achievements. There may likewise be going with tangible and palpable, physical and well-being incapability.

Very rarely would a case with a serious to significant professional handicap has a tangible fall in expected physical behaviour, physical deficiency or therapeutic/well-being needs, reinforce administrations from an instructor's associate and additionally the skill of a word-related advisor, a physiotherapist, a discourse dialect pathologist, or a nomad authority might be required. These different experts need to work with the school-based group so joint arranging can occur and data can be shared.

Cases with moderate to significant professional inabilities can, as a rule, learn various fitting skills and practices, and can profit by being with cases who do not experience such handicaps. In any case, they need extra past combination and socialization. These strategies are successful in recognizing the case's qualities and needs and in evoking association and responsibility from companions and those included in supporting the case in setting and achieving objectives.

The more established the case or the more extreme the handicap, the more obvious is the requirement for useful instructive destinations. Since the abilities taught ought to be those that bear the cost of numerous open doors for practice, and since instructing need to be in arrangement for grown-up life in the group, the case will require an expanding level of adaptive guideline in group situations.

MEASURING, EVALUATING AND REPORTING

A few cases with professional deficiency might have the capacity to accomplish the learning results for their subjects or course with adjustments. For these target cases, assessment will be founded on the consistent gauges (i.e., the degree to which the learning results for the course are achieved). The technique for assessment will be predictable with the professional protocol and with service reporting approaches in appreciation to the utilization of remarks or letter grades.

Numerous cases with lesser apt deficiency will be given housing as changes to their instructive system. Adjustments are instructional and evaluation related choices made to oblige an individual's uncommon needs so that the case is able to accomplish personalized learning objectives and expected consequences.

Reports to guardians must be given on the same timetable utilized for all cases. Advancement must be accounted for as for all segments of the system, and with reference to accomplishment in connection to prescribed professional objectives. Reports are required to show the adjustments and changes made to the case's history and other manipulative framework. All work force specifically included in the continuous instructive project including the classroom instructor, master trainer, discourse dialect pathologist must also give an account of case advancement.

Commonly observed cases with moderate to significant professional incompetence will require major changes to parts of their projects so that some of their learning results will be considerably not quite the same as the general educational programs. In these cases, assessment will be founded on the extent to which the personal consequences are achieved.

PROFESSIONAL INSTRUCTORS AND TRAINERS

With adequate preparing and experience, classroom instructors equipped for incorporating cases with professional handicaps will be given projects in which they can be effective, given that specific support is accessible when required. In executing, preparing opportunities and a community group methodology are prescribed to expedite and energize the advancement of the important abilities and understandings which the classroom instructor may require. Master educators with obligations regarding supporting cases with professional incompetence need to satisfy

the capabilities depicted for learning. Later, continuous innovative advances in versatile gadgets identified with professional access, natural controls and expanded correspondence have enormously upgraded learning open doors for cases with issues and challenges. Expert staff need to stay educated about current improvements and present new advancements as adequate and competent.

Teachers' Assistants

Instructors' colleagues who work in classrooms with cases with professional handicaps ought to have adequate aptitudes and preparing for the obligations they are assigned. It ought to be noticed that instructors' partners work under the bearing of an educator and the general supervision of a school vital.

Students with Intellectual Disabilities

Learning disability delineates multiple challenges and issues that may influence the obtaining, association, maintenance, comprehension or utilization of verbal or nonverbal data. These influence learning in people who generally exhibit at any rate normal potential for speculation or thinking.

Taking in inabilities result from debilitations in one or more procedures identified with seeing, considering, recollecting or learning, these incorporate, however are not constrained to: dialect handling, phonological preparing, visual spatial handling, handling rate, memory and consideration, and official capacities (e.g. arranging and basic leadership). La Malfa, Lassi, Bertelli, & Placidi (2004) have also explained the implications on intellectual disability. Their research elaborates the fundamental aspects that impede the intellectual and mental ability in adults and young individuals.

Learning inabilities may likewise include troubles with authoritative abilities, social discernment, social cooperation and viewpoint taking. Learning inabilities are deep-rooted. The path in which they are communicated may differ over an individual's lifetime, contingent upon the association between the requests of nature and the individual's qualities and necessities. Learning incapacities are recommended by surprising under-accomplishment or accomplishment that is kept up just by strangely elevated amounts of exertion and backing.

Learning handicaps are because of hereditary or neurological components or damage that changes mind capacity in a way that influences one or more procedures identified with learning. These clutters are not because of hearing or vision issues, social-monetary components, social or semantic contrasts, absence of inspiration, lacking or deficient guideline, despite the fact that these elements may convolute the difficulties confronted by people with learning dysfunctions. Learning incapacities may exist together with different issue, for example, attentional, behavioral or passionate clutters, tangible weaknesses, or other medicinal conditions.

DISCOVERING AND DIAGNOSIS PRIOR TO TREATMENT

Schools and school boards are in charge of evaluating cases with the end aims and objectives of arranging guideline and improve administrations and for recognizing cases with unique needs. Cases with learning deficiency and dysfunctions may not exhibit evident unique needs before entering the educational system. Because of their capacity to perform well in a few regions, professional challenges might be misjudged and seen as absence of inspiration until the learning handicaps are distinguished.

Distinguishing learning handicaps ahead of schedule could reasonably be expected and can encourage early mediation and may minimize progressing learning troubles. Because of the varieties among learning inabilities, cases show a scope of challenges and qualities. Subsequently, learning handicaps might be recognized at a different phases of the case's school life. Distinguishing learning inabilities requires numerous formal and casual appraisal data. Capacity, professional accomplishment and subjective procedures ought to be tended to through methodical documentation of the case's classroom execution and reaction to shifting instructional methodologies and in addition through institutionalized estimation. A procedure of precise evaluation and documentation recognizes cases with learning handicaps taking the following into account:

1. Relentless trouble learning
2. Normal or above normal psychological capacity
3. Shortcomings in psychological preparing.

1. PERSISTENT DIFFICULTY LEARNING

The case's chance to learn is an essential thought in recognizing learning handicaps. Persevering trouble suggests limited advance that cannot be

clarified by lacking participation, social or phonetic contrasts, tangible shortages, social enthusiastic elements, well-being issues or poor guideline. Momentum research portrays steady scholastic troubles as lacking reaction to direction or mediation.

Learning inabilities might be suspected when a case has had chances to learn; however has not shown expected advancement toward learning results identified with oral dialect advancement, procurement of pre-scholastic aptitudes, procurement of perusing, composed dialect, or numeracy, maintenance, association, comprehension or utilization of verbal or non-verbal data such as showing authoritative aptitudes, utilizing images, understanding visual guides, applying and summing up learning.

Proof of persevering learning troubles may incorporate curriculum-based evaluation, institutionalized accomplishment tests or arrangement of case work. Evaluation information ought to archive deliberate endeavors to address the case's trouble through instructional adjustments and also the degree of the case's continuous challenges notwithstanding the varieties in instructional methodologies.

2. AVERAGE OR ABOVE AVERAGE COGNITIVE ABILITY

The standard approach to evaluate intellectual capacity is to utilize standard referenced tests of subjective capacities, normally known as Level C Appraisal. Another approach to appraise intellectual capacity is to utilize a battery of standard referenced measures, normally known as level B tests, to evaluate professional aptitudes that rely on the case's capacity to reason. Such measures may be centered on numerical critical thinking, perusing perception, composed expression and listening appreciation. Not all tests that invite attention towards these aptitudes can be expected to yield a legitimate assessment of capacity. In the event that scholastic measures are utilized to gauge capacity, school sheets ought to guarantee that the measures utilized are fitting for this reason. The utilization of more than one measure is essential.

Cases with normal or above potential will score at or above one standard deviation underneath the mean for their age on government sanctioned tests.

3. WEAKNESSES IN COGNITIVE PROCESSING

Cases with learning incapacities have disabilities to forms identified with seeing, considering, recollecting or learning. Their taking in challenges may emerge from shortages in different parts of practicable aspects. Particular shortcomings might be proposed by casual measures of classroom execution and after that be affirmed through standard referenced evaluation (Level C). Recognizing a case's handling challenges gives a clarification to professional troubles and encourages the execution of proper instructional methodologies that may empower the case to show enhanced advancement. Social-enthusiastic status ought to likewise be considered when exploring conceivable learning handicaps.

Cases with learning handicaps may exhibit social issues as the aftereffect of their shortages in seeing or preparing visual hints and a few parts of dialect. These may show up as troubles with social observation, social connection and point of view taking. Cases may create passionate challenges, with or without social issues as the consequence of dissatisfaction and self-regard issues creating auxiliary to their learning inabilities.

A few cases with normal capacity who do not have learning handicaps may show tireless trouble learning because of anxiety connected with disregard, misuse, family change, injury, or other social issues. Specific evaluation is required for formal finding of learning handicaps. Level B and Level C appraisals must be directed by properly qualified experts who can translate results considering the case's chances for learning, learning designs, way to deal with assignments and reaction to guideline. Now and again, learning inabilities might be distinguished in clinical settings. The evaluation might be multidisciplinary, supplementing psycho-instructive appraisal with data from a discourse dialect pathologist, a word related advisor or other restorative staff. Appraisal of a case to distinguish a taking in deficiency ought to coordinate data from various sources including the family, classroom educator, advisors, if included, learning help or boost records, formal case records, and any applicable therapeutic reports.

Learning incapacities shift significantly in their seriousness and effect on learning. Cases with serious learning handicaps will by and large require concentrated mediation. Cases whose learning handicaps have not been

distinguished and tended to early as often as possible display optional passionate and behavioral challenges. Cases might be skilled and learning debilitated. Cases with learning incapacities require an instructive arrangement that expands on their qualities while remediating and making up for their inabilities

This direction may happen in general classrooms, yet this does not block the utilization of various learning situations, for example, little gathering guideline in an asset room, independent classes or other specific settings. The objective of the situation ought to be to meet the cases' instructive needs.

ASSESSING AND MEASURING EFFECTIVE ATTAINMENT

Much of the time, cases will participate in the standard project with the vital adjustments (e.g., substitute assessment strategies). Assessment will be founded on the consistent guidelines. The technique for assessment will be steady with the required protocol and with service reporting strategies in admiration to the utilization of remarks or letter grades.

REPORTING

Reports to guardians ought to be given in the same arrangement and on the same timetable utilized for all cases. Advancement ought to be accounted for as for all parts of the project, and with reference to advance in connection to the protocol. Reports ought to demonstrate the adjustments made to the case's instructive system, and execution with respect to generally-held desires. All work force specifically included in the continuous instructive project.

TEACHERS

With adequate preparing and experience, classroom educators will have the capacity to address the issues of most cases with learning inabilities and give an instruction program in which they can be effective, given that specific backing is accessible when required. In administration preparing opportunities and a community oriented group methodology are prescribed to boost and empower the improvement of the essential abilities and understandings which the classroom educator may require. Instructors with authority obligations regarding supporting cases with learning inabilities ought to satisfy the capabilities depicted for Learning Assistance Teacher.

TEACHERS' ASSISTANTS

Educators' aides working with cases with learning handicaps ought to have adequate abilities preparing for the obligations they are relegated, including: A comprehension of learning inabilities; Synergistic and relational abilities; Procedures for spurring cases; and conduct administration abilities.

CONCLUSION

Coping with learning disability is a complex phenomenon, but not beyond human influence. It must be regarded that God has created these intellectually less competent students' and individuals with His own discretion that human influence is unable to cope and adjust with. It is the responsibility of the people and the community by and large to accept these differently able individuals no the disable folks.

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A STUDY OF SELF-CONCEPT OF STUDENTS WITH VISUAL IMPAIRMENT STUDYING IN INTEGRATED AND SPECIAL SCHOOL SETTINGS

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ABSTRACT

The present study is an attempt to scientifically explore the phenomenon of self-concept as this emerged in different educational settings, i.e., integrated and special educational settings by comparing the two groups of students on this single variable. A detailed account of the procedure followed including; design of research, methods, variables, sampling procedure and sample, tools used in the study, data collection procedure and statistical techniques used to analyze the data. The findings demonstrate that the students with visual impairment in integrated school settings do not differ significantly from their blind counterparts in the special school settings. With regard to the physical self-concept of these students in two different educational settings, no significant differences were found between the two groups.

Key Words: Visual Impairment, Self-Concept, Integration, Special Education, Low Vision, Blindness

1. INTRODUCTION

This is concluded by Lifshitz, Hen, &Weisse (2007) that integrated schooling would enhance the social and emotional wellbeing of the students with visual impairment (SVI), that it will bring them into educational and economic mainstream, will be helpful in total citizenship involvement, will sensitize them to their role in this endeavor, will provide favorable learning experiences and ultimately result in the life long quality education to which they are also entitled to as their sighted counterparts. It is also thought that it will provide them a continuity of services from early detection and early intervention through schooling, vocational education, independent living in the community and meets their specific needs (Pfeiffer & Pinquart, 2011). It will also ensure that SVI:

- a) experience a sense of participation and achievement with the group with whom they receive their education (Gall, Gall & Borg, 2007),
- b) achieve increasing independence within the context in which they receive their education (Grace & Gravestock, 2009),
- c) participate in decision making about choices of educational program and thereby learns skills of self-advocacy (Mastropieri & Scruggs, 2010), and
- d) receive their education in context which reflect on ecological perspective, i.e. context which involve a family and community resources (Pauline, 2003).

Thus it is evident from the examination of above observations that emphasis in integration is on all-round development of persons with visual impairment. This encompasses the promotion of positive self-concept the most important aspect of adjustment.

The self is defined as the object of an individual's own perception. It is that part of one's personality of which one is aware. William James (1890) in his original discussion of the self, described the way in which the self could be expanded to include one's clothes, one's home, and one's society. He described self as total sum of that one can call his own or total organism. Self encompasses both the "I" and "Me" i.e. both the subject and the object of the experiences, both the knower and the known.

Thus the concept of self emerges from an individual's interaction with the social and physical world. Various theorists have described the means by which this process takes place in different ways. Freud (1920) e.g., sees ego and super ego developing as psychic structures steering the primitive impulses arising from the id out of the dangers of the real world. Erikson (1956) sees identity emerging during adolescent year from the selected earlier identifications. Piaget (1932) described the process of assimilation and accommodation by means of which an individual builds the reality of the world in to his own cognitive structure. Social learning theorists (Bandura, 1977; Miller & Dollard, 1941) describe the process of determination of self-concept in terms of observational learning, identification and modeling processes.

The case for integration as a viable approach of providing quality education to the blind children usually emphasize equality of opportunities, effective use of resources, reduction in isolation and stigma and a wider range of experiences including promotion of feelings of self-worth. An underlying assumption is that ordinary schooling would enhance the social and emotional wellbeing of the visually impaired children with special educational needs (Wehman, 2006).

In essence the development of self-concept depends largely on interaction with other people and on the responses of significant others in the visually impaired child's social environment as well as his own modes of responses. Visually impaired persons face a wide divergence of negative attitudes towards visual impairment (Alexander, 1996). Many of the stereotypic misconceptions on the part of the sighted have a depressive effect on the self-esteem of the persons with visual impairment especially where these attitudes are held by parents, teachers, rehabilitation workers and peers in the schools.

Another factor important to the development of self-concept is the degree of warmth, care and acceptance exhibited by significant others including parents, teachers, peers and rehabilitation workers. Just as attributes are learnt by reflections from others, so are feelings of esteem and worth. These people come to value themselves as they valued by others (Griffin-Shirley & Nes, 2005). Strong positive correlation between visually impairer's level of self-esteem and the degree of warmth, care and acceptance shown by significant others were found by Burns (1982).

The main objective of the present study was to see the effect of integrated and special school settings on the social-emotional wellbeing of children with visual impairment. Also the realization that success of rehabilitation and educational programs for disabled including the visually impaired should be measured in terms of the opportunities and experiences it provides to the individuals for the development of their positive self-concept and self-esteem (Kef, 2002) form the basis of formulation of the present problem. Hence the present study was designed to compare the two group of SVI, one studying in integrated and the other studying in special school settings.

2. METHODOLOGY

2.1 Design of the Study

Keeping in mind the nature of the present study a two group (matched) ex post facto research design was considered to be the most appropriate one. In ex post facto research treatment cannot be manipulated, because the effect of independent variables on the dependent variables has already occurred. In this study also, the effect of the two independent variables i.e. integrated school settings and special school settings had already occurred on the dependent variable, i.e., self-concept. However, to get the scores on the two variables purely due to this single independent variables it was considered appropriate to control the extraneous variables such as age, sex and socio-economic status by matching the two groups on the this variable.

This is with this understanding that the variables in present study have been categorized and treated accordingly.

- (A) **Independent variable:** Different educational setting, i.e. integrated school settings and special school settings are two independent variables in the study.
- (B) **Dependent variable:** Self-concept score of visually impaired students studying in integrated and special school settings is the only dependent variable in the study.
- (C) **Attribute variables:** By applying the definition of attribute variables described just in this section, sex, socio - economic status, and age students with visual impairment in both the educational settings, are treated the attribute variables.

2.2 Sample and Sampling:

Two types of sampling procedures were adopted in the selection of subjects for the study. These were as follows:

1. Purposive cum convenience sampling procedure at the stage of selection of schools, meaning thereby that all the schools and institutions having visually impaired students in the age group of 14 and above years, for integrated education were selected and all they were selected to constitute the one group.

2. Stratified and random sampling procedure was adopted while selecting the visually impaired students from the special schools. The students from special schools were randomly selected to age appropriation and administered SES scales to match them with their counterparts in integrated school settings. This procedure was continued till the match for all the visually impaired students in integrated school settings was found. The characteristics of the sample are described in Table-1.

Table 1
Characteristics of the Sample

Characteristics	GROUPS			
	Integrated School (N = 52)		Special Schools (N=52)	
	Boys (30)	Girls (22)	Boys (30)	Girls (22)
Age range (in years)	14.2- 18.8	14.1- 20.2	14.0- 18.4	14.0- 20.4
Mean Age	16.84	16.65	16.16	16.57
SD	1.128	1.49	1.27	1.31
SES Mean	13.43	12.68	13.97	12.27
SD	6.834	6.26	6.60	7.94

It is evident from the above table that the differences in means age and SES of the two groups are not much. Also the comparative standard

deviations on these variables of the two groups are very small, indicating that the two groups are quite matched and equalized by the one to one or student to student matching method adopted in the study. The sample was drawn from different schools in Karachi providing integrated as well as special education to the visually impaired students. The distribution of sample as drawn from different special and integrated schools is presented below:

Table 2
Distribution of Sample (School wise)

S. No.	Name of Schools	Sample	Type of Educational Settings
1.	Ida Rieu School for Deaf & Blind Children	30	Special School
2.	Shaheed-e-Millat Special Education Centre	22	Special School
3.	Aziz Begum Memorial School	16	Inclusive School
4.	Iqbal Memorial Inclusive School	36	Inclusive School
TOTAL		104	

2.3 Apparatuses

The investigator used the following apparatuses:

a) Personal Information Blank

To obtain information on certain demographic variables including; age, sex, disability, degree of disability, age at the onset of disability, educational history, and income of parents - a personal information blank was developed by the investigator.

b) Socio-Economic Status Scale

The scale has two forms **A** and **B**. Form **A** may be used as a schedule to be completed by the investigator by asking questions especially in the case of illiterate persons or the subjects themselves. Form **B** requires the students

in schools and colleges to fill up the particulars regarding their parent's or guardian's. The inventory is self-explanatory. The various items relating to education, occupation and income may be completed.

c) Self-Concept Questionnaire

The following dimensions of self-concept are measured in the questionnaire.

i) Physical self-concept: This refers to an individual's view of their body, health, physical appearance and strength.

ii) Social-Self-concept: This indicates an individual's sense of worth in social interactions.

iii) Temperamental self-concept: This refers to an individual's view of their prevailing emotional state or predominance of a particular kind of emotional reaction.

iv) Educational self-concept: Items in the questionnaire measures an individual's view of themselves in relation to school, teacher and extracurricular activities.

2.4 Data Collection

After having matched the two groups of visually impaired students, one studying in integrated and another studying in special school settings for age, sex, and SES, the single test, i.e. self-concept questionnaire was administered to collect the data. The apparatuses were administered in a group of 5 each as these had already been transcribed into Braille. Scoring of each test was done as per manual of each test. For the self-concept questionnaire seven types of scores were obtained. Score for the full questionnaire indicating total or global self - concept; physical self-concept scores, social self-concept scores, educational self-concept scores, moral self-concept scores, temperamental self-concept scores and intellectual self-concept scores.

2.5 Statistical Techniques used to analyze the data

Since the purpose of the study was to compare the two groups on single dependent variable, i.e. self - concept, analysis of variance and t-test were considered to be the appropriate statistical techniques to analyze the data.

Mean and standard deviation of different groups were also computed. The two groups were compared by F test on global self-concept scores as well as on its subtests and personally perceived self, socially perceived self. In addition components of variance were also computed to establish the contribution of variance in independent variables to the total variance to dependent variables.

3. FINDINGS

The two groups, from different educational settings were compared in total (global self-concept sources) and on each of its six subtests by employing analysis of variance and by calculating the t- values. The following table gives the comparative mean and standard deviation values on total self-concept.

Table 3
Mean and S.D. of Total Self-Concept Scores of Visually Impaired Students

Groups	Mean	Standard Deviation
Students in Integrated school settings	170.57692	8.34
Students in Special school settings	167.11538	11.76

The table 3 reveals that the mean scores of group I, i.e. students in integrated schools settings is better than group II, i.e. students studying in special school settings. Thus in order to find out whether these differences in mean scores were significant analysis of variance was Students in Special school settings done and the results are presented in table 4.

Table 4
ANOVA of Self-concept (Total) of Students in Integrated and Special School Settings

Sources of Variance	Df	Sum of squares	Mean squares	F
Between Groups	1	311.4932	311.4932	2.9375
Within Groups	102	10816	106.03922	
Total	103	11127.5		

*Not significant at either .05 or .01 level of confidence

The results in the above table reveals that the two groups do not differ significantly on self-concept scores and hence the hypothesis that there will be no significant differences between blind students studying in integrated and special school setting is accepted. Correlation ratio $E = .1673111$ also shows that there is very low relationship between the educational settings as independent variable and self-concept as dependent variable.

Table 5
Components of Variance

N	Mean squares	Components of variance	Percent
52	311.4923	$205.45308/52=3.951$	3.9522
	-106.0392	+106.0392	
	205.45308	109.99	100

Table 5 shows that the independent variable contributes only 3.5922 percent to the total variance in total self-concept, meaning thereby no effect on dependent variables.

4. DISCUSSION

The findings in this regard demonstrate that the visually impaired students in integrated school settings do not differ significantly from their counterparts in the special school settings. However, the students in integrated schools were found to be having more mean score (170.577) than the students in special school setting (mean score; 167.115). This implies that the visually impaired students in integrated school settings, despite the no significant differences have more positive self-concept than the visually impaired students in another setting. As the analysis of variance indicated only 3.59% of the total variance in self-concept scores of the two groups were accounted for the between group variances. The rest of the variances were attributed to the within group variances. Thus the more means scores of students in integrated school settings than the students in special school settings in total self-concepts are due to within groups variances, i.e., educational settings have no role in these variances.

The results are in conformity with earlier studies conducted in this area by Mara (2000) with learning disabled; Lynn, (1996) with learning disabled; and Brown & Barrett (2011) with visually impaired children, aged 15-19 years. In all these studies the effect of different educational settings on the global self-concept of disabled children was found to be not significant. The results of this investigation support the hypothesis that no significant differences exists between students in integrated school settings with regard to their self-concept.

The total self-concept of students in two separate educational settings seems to be unrelated to the effect of educational settings in the present study. The results of this sort has been interpreted and discussed with caution for several reasons. First there was no control group to assess the pretest and post test scores of students in both the groups on their total self-concept to assess the effects of integrated education settings benefits. Secondly, since the present study was not at evaluated investigation of the components of two different educational settings, that constitute for any successful program, the conclusion that the benefits of mainstreaming or integrated education on the development of blind student's self-concept do not count much, especially if seen in the light of the results of the present study, do not stand on any logic or reasoning. The results simply tells the trend which many other studies have also demonstrated.

5. EDUCATIONAL IMPLICATIONS

The results of the study have wider implications so far as the education and rehabilitation of visually impaired students is concerned. The findings demonstrate that several benefits in terms of social-emotional wellbeing accrue for students with visual impairment in integrated educational settings. The significant differences found between the two groups in separate educational settings illustrate this view. The non-significant differences found on other dimensions of self-concept, however does not support this thesis.

In order to help visually impaired children to establish a positive self-concept, it is necessary to provide these children with opportunities that enhance the awareness of body appearance and stress on physical activities, promotion of feelings of belongingness, acceptance, support and caring as opposed to feelings of rejection, abandonment and alienation. Avoiding unfavorable remarks about a child's physical features which the child has no ability to change should be ensured by the teachers and educational authorities. Adults can comment favorably about a child's physical characteristics particularly those that are valued by the surrounding society.

When visually impaired students are placed in the regular classroom they carry with them the stigma of being visually impaired in a way that disqualifies them from certain activities and/or influences their acceptability to sighted peer. Students who are perceived as handicapped by non-handicapped students are viewed in negative and prejudiced ways, whether or not the handicapped children are in the same or separate classrooms (Blake & Rust, 2002). Johnson and Johnson, 1980). Therefore in view of this the educational planners and authorities may refer to the findings of the present and other studies when planning for the education and rehabilitation of visually impaired students keeping in mind the centrality of self-concept in this process.

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THE POLIO AFFECTED CHILDREN IN KARACHI HOSPITALS AN ANALYSIS OF PARENTS' SOCIO- ECONOMIC PROBLEMS

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ABSTRACT

Poliomyelitis is caused by the polio virus. It is an infectious disease that causes infantile paralysis. Contaminated water for drinking has been one of the sources of polio virus. The disease is caused by ingesting the water. Vaccine is one of the main sources of its control and prevention. Clean water should also be made available to control the spread of polio. Besides tremendous progress made in it has remained uncontrolled in Pakistan. There are still 17 cases that have been recorded in 2016. There is one recently declared in city of Karachi. Although parents know it is a harmful, but some have been influenced by religious or extremists' groups they fell hesitate to get their children vaccinated. People's mindset is one of the reasons for the resistance to the polio vaccine. Many issues are more pressing than getting children vaccinated. Parents with polio affected children have lack of knowledge and unaware of the source from where they could get support once the disease attacks. Several studies indicated that parents' education can be one of the main sources for eradication. Highest numbers of polio cases are found again in 2016. Our children are not secure in spite of all the efforts are made till today. This article aims at: (1) The problem of polio affected children, (2) Number of polio affected children in Karachi, (3) Socio-economic problems of parents having polio affected children, (4). Efforts of public sector for the support of parents having polio affected children, (5) discussion, conclusions followed by selected bibliography.

Key words: Polio, Affected children, Karachi, Parents, Socio-economic problems.

INTRODUCTION

The Poliomyelitis, often called polio or infantile paralysis, is an infectious disease (SAAD, 2015). It is caused by the polio virus (Atkinson et al, 2009). It is one of the ancient diseases prevailing in the world (Ali, 2000). Poliomyelitis has existed for thousands of years, with depictions of the disease in ancient art (CDC, 2006). It has been mentioned in the primitive old Egyptian literature as well as in the Old Testament of the Bible. In Egypt, disabled dog's photos are found. There are some carvings on the stones found that show a lame person. He has one leg shorter than the other. The affect is usually lower limbs becoming weaker having affected by virus (Daniel, 1999).

Although, polio was prevalent since centuries around the globe, but it was scientifically identified in the eighteenth century. Once one is infected there is no specific treatment (www.polioeradication.org).

In Europe it was a wide spread disease in the nineteenth century. In other parts of the world, such as USA, concern was shown regarding affect of this virus Later on; scientists invented its vaccine (Aylward, 2006). By that time it was diagnosed that the virus was being spread through unclean water. The germ goes into the stomach through water and diet and affects the nerves system of the body (Obregon, 2014). But before the invention of vaccine, the disease was being controlled by supply of clean drinking water to some extent. In about 0.5% of cases there is muscle weakness resulting in the inability. After its attack, in certain cases, it can occur, over a few hours or few days Nishtar, 2012).

Children under five are the most common and easiest prey of the virus. The weakness most often involves the legs and lower part of body. But may less commonly involve the muscles of the head, neck and diaphragm. Many, but not all in people, fully recover from the disease. Those with muscle weakness, about 2% to 5% of children and 15% to 30% of adults often die (Fine, 1999). Another 25% of people have minor symptoms. These include fever, tiredness, and a sore throat. Some 5% have headache, neck stiffness and pains in the arms and legs. Vomiting in some cases is also seen. These people usually return to normal within one or two weeks. In up to 70% of the infections, there are no symptoms (Aslam, 2012). Years after recovery, post-polio syndrome may occur, with a slow

development of muscle weakness similar to that which the person had during the initial infection Wheeler, 2009).

Major outbreaks started to occur in the late 19th century in Europe and the United States. In the 20th century, it became one of the most worrying childhood diseases in these areas (Peters, 2013). The first polio vaccine was developed in the 1950s by Jonas Salk. It is hoped that vaccination efforts and early detection of cases will result in global eradication of the disease by 2018.

Polio virus is usually spread from person to person, through infected fecal matter entering the mouth. It may also be spread, by food or water containing human feces and less commonly from infected saliva. Those who are infected, even if no symptoms are present, may spread the disease for up to six weeks even. Though, the disease may be diagnosed by finding the virus in the feces or detecting antibodies against it in the blood. This disease only occurs naturally in humans beings (Owais, 2011).

The disease is preventable with the polio vaccine. In 1955 the polio vaccine was introduced. In 1961, it was supplied in drops for the fewer than 5 year children. Throughout the world, with the polio vaccine, number of case dropped tremendously (Nishtar, 2010).

In Pakistan, in the 1970s, to combat deaths from six vaccine-preventable diseases including polio vaccine, the Expanded Program of Immunization (EPI) was begun by the World Health Organization (WHO). In 1980, the EPI had vaccinated just 2% of the population against polio. By the 1990, the coverage had increased to 54%, however, a number of doses are required for it to be effective (Mangrio, 2008).

In 2014, the disease was only spreading between people in Afghanistan, Nigeria, and Pakistan (Dawn: 2016). In 2015, Nigeria had stopped the spread of wild polio virus but it re-occurred in 2016 (www.bbc.com;WHO, 2014). As compared to last year in 2015, according to the Ministry of National Health Services (NHS) the country has witnessed a 62 per cent drop in polio cases during 2016 (www.theNational;WHO, 2016).

But in Pakistan still we could not overcome the spread of polio completely. Because many Afghan refugees and immigrants come to Pakistan and they bring this disease as well (Hedayat, 2015). Although they may know it is a harmful, but they feel hesitate to get their children vaccinated (Svea, 2010).

This article aims at: (1) The problem of polio affected children, (2) Number of polio affected children in Karachi, (3) Socio-economic problems of parents having polio affected children, (4). Efforts of public sector for the support of parents having polio affected children, (5) discussion, conclusions and recommendations followed by selected bibliography.

2. METHODOLOGY

The present study is descriptive in nature. The universe of the present study was Karachi. A sample of 60 respondents was taken ageing from 3 –12 years. Respondents were male and female polio affected patients and their parents living in Karachi. The convenience sampling methods was used. At the time of survey respondents were visiting NGOs and public hospitals services in Karachi (Jinnah, Civil etc.) for health issues.

A questionnaire based on questions related to problems based on health, socio-economic of patients and parents and their perception. It included both open and close ended questions filled by researcher and a team of enumerators. Initially they took interest in filling the questionnaire but became slightly conscious when some personal questions were asked.

In certain cases interview schedule was employed. Both qualitative and quantitative methods were employed. A case study and group discussion was also used to get accurate picture of the situation. The data was analyzed by simple frequency tables.

2. FINDINGS

Table -1
Respondent's According to Gender

S. No.	VARIABLE (Gender)	FREQUENCY	PERCENTAGE
1	Male	32	53.33%
2	Female	28	46.33%
3			
	Total	60	100%

Majority of the affected children with polio, who happen to visit health facilities are male and they are 53.33%. According to gender distribution male are more affected with the disease.

Table -2
Respondent's According to Age

S. No.	VARIABLE (AGE)	FREQUENCY	PERCENTAGE
1	3-6 years	10	16.66%
2	7-10 years	30	50%
3	11 and above	20	33.33%
	Total	60	100%

The above table indicates, that majority of the respondents are in the age bracket of 7 and 10. Majority is male as table -1 indicates, and is illiterate, for that there can be multiple reasons. Inadequate institutes, inclusive education are not encouraged in educational institutions.

Table -3
Respondent's According to Education

S. No.	VARIABLE (Education)	FREQUENCY	PERCENTAGE
1	Literate	20	33.33 %
2	Illiterate	40	66.66%
3			
	Total	60	100%

According to the data mentioned in the above table, majority of the affected children are not literate, although they are in a school going age bracket. This can be termed that there are not enough facilities for special persons including children affected by polio, or parents are not aware about these public and private facilities.

Table -4
Respondent's According to Disability

S. No.	VARIABLE (Disability)	FREQUENCY	PERCENTAGE
1	Total	17	28.33%
2	Partial	43	71.66%
3			
	Total	60	100 %

Majority of the affected polio children are 71.66%, are partially affected with the disease whereas, totally affected are 28.33%.

Table -5

Respondent's According to Duration of Disability

S. No.	VARIABLE (Duration)	FREQUENCY	PERCENTAGE
1	By birth	22	36.66%
2	After birth	38	63.33%
3			
	Total	60%	100%

All of the respondents of this study are polio affected, but majority 63.33% of them, have gained this after birth.

Table -6

Respondent's According to Accommodation

S. No.	VARIABLE (Accommodation)	FREQUENCY	PERCENTAGE
1	Own	44	73.33%
2	Rented	16	26.66%
3			
	Total	60	100%

Majority of the affected children with polio are living I their own houses and their percentage is 73.33%.

Table -7**Respondent's According to Treatment**

S. No.	VARIABLE (Treatment)	FREQUENCY	PERCENTAGE
1	Aloe-pathetic medical	40	66.66%
2	Homeopathic	17	28.33%
3	Spiritual	03	05.00%
	Total	60	100%

Majority of the affected children with polio are getting treatment at medical centers and their percentage is 66.66%. A good number is under homeopathic treatment.

Table -8**Respondent's According to Place of Educational Institution**

S. No.	VARIABLE (Place)	FREQUENCY	PERCENTAGE
1	Private (NGO facilities)	30	50.00%
2	Home	20	40.00%
3	Public (facilities/school s)	10	10.00%
	Total	60	100 %

Most of the special (affected) children are going to private educational facilities mainly managed by private owners including NGOs or stay at home and do not get education.

Table -9

Respondent's According to Arrangement of Guide

S. No.	VARIABLE (Guide)	FREQUENCY	PERCENTAGE
1	Yes	15	25.00%
2	No	45	75.00%
3			
	Total	60	100%

Most of the affected polio children do not have any special guide at home to help and support them. It shows that facilities are very limited or do not exist at all.

Table -10

Respondent's According to Rehabilitation Results

S. No.	VARIABLE (rehabilitation results)	FREQUENCY	PERCENTAGE
1	Benefited	15	25.00%
2	Partial benefited	10	16.66%
3	Not benefited	35	58.33%
		60	100%

Majority of the affected polio children are not getting any benefit through rehabilitation their percentage is 58.33%. A small number of 25% is getting benefit through rehabilitation.

Table -11
Number of Polio Case in Karachi in last
Three Years

S. No.	Place	Year wise	Number of cases in Karachi	Number of cases in province of Sindh	Number of cases, all districts of Pakistan including Karachi
1	Karachi	2014	23	30	306
2	Karachi	2015	07	12	54
3	Karachi	2016	01	07	17
	Total case in 3 years		23	39	377

Source: polio case district wise reports 2014- 2015 and 2016. Data of reports is taken from NIH govt. till Nov.2016.

According to district wise reports issued by NIH, the above mentioned reports mentioned that in Karachi, there are altogether 23 registered polio cases during the last three years (January 2014 to November 2016) as mentioned. In the districts wise reports in the year 2015, 54 children were diagnosed with polio in the country, 12 of them in Sindh. In Karachi in 2016 there is one case till November 2016. In last three years, number of cases has dropped tremendously, that shows a national commitment, to end polio by 2018 by the government and polio vaccine teams (GOP, 2014; 2015; and 2016).

According to The Sindh Provincial Health Authorities a 34-month-old boy living in Gadap Town had been diagnosed with polio. The first case of the disease reported in February 2016 in the country (The News, 2016). The National Institute of Health, Islamabad tested the samples and confirmed that Aijaz Khan, s/o Sher Ali Khan, a resident of UC-7 in Yousuf Goth, Gadap Town, was suffering from polio. Sindh Emergency Operations Centre for Polio explained that the boy belonged to a Pashtu family, had not undergone routine immunization, but was administered at least seven doses of oral polio vaccine drops during special drives. It shows that

besides vaccination there are several other reasons for spread of polio virus.

The children living in Gadap and other slums were extremely vulnerable because of malnourishment, frequent chest and abdominal infections and humid climate of the city. According to health professional children require over 10 doses of vaccine to control. Having immunity children will become safe from polio virus. Malnourishment, frequent infections and the humid climate of an area can weaken some children's immune system and they are infected by the polio virus despite having been administered multiple doses of OPV (Khan, 2015).

4. DISCUSSION

Long spacing during vaccination is one of the reasons that parents are facing problems; because of transportation problems parents are unable to get time. Poor parents cannot spare time, as they lose jobs if take leave or day off.

Militant groups, like Tehrik-i-Taliban propagandize that they are made out of pig fat or contain alcohol (Lenzer, 2011). The immunization sterilizes the local population and it has increased refusal for taking vaccines (Imran, 2012). Mindset of the population is another reason for refusal. In views of many experts, the allocation of funds to prevent polio problem is more efficient than its treatment (Khan, 2011).

It is a policy issue that if source of virus is unclean water, than the efforts must be made to provide purified water rather.

Poor socio-economic status, illiteracy, is attributable to decreased rates of immunization completion in rural and semi urban areas (Khan, 2011).

Parent's education is the most important determinants' in Pakistan, in recent studies carried out it has been shown that the father's knowledge about health most impacted immunization decisions. It has been noted in some of the researchers that improved education; improve health, than even the provision of health services (Obregon, 2014).

Following is the major affects from the parents' problems whose' children are affected:

- Parents usually make several excuses if they do not want to administer polio drops for their children, and it has several multiple reasons.
- Malnutrition in our children is another factor in low resistance to diseases and low efficacy of the polio vaccine.
- Parent do not trust vaccine, especially due to the propaganda of the clerics and extremists in areas of dominated by religious groups.
- After the attack of Abbotabad and involvement of the Dr. Afridi in KPK parents resists due to extremists pressure after the murder of Bin Laden.
- Parents do not want to get polio dose they make excuses and point out that: children have take drops already:
 1. That they are sleeping
 2. That they have take already
 3. That they are gone to their grandparents homes
 4. Their families do not allow to have drops

Polio eradication officials have planned to conduct inject-able polio vaccine drives in certain areas of Karachi, Quetta and Peshawar by 2016, so that the immunity of children with these complications could be boosted. Pakistan is not the only country, but this problem was faced by India and Bangladesh as well, as despite reaching every child and administering multiple doses of polio vaccine to them, polio cases kept surfacing in the two countries for quite some time.

- The best solution is that parents have their children vaccinated whenever a team visits their home, or they can have the drops administered themselves at a clinic.
- The Karachi commissioner is the head of Polio Eradication Task Force in Karachi. The highest commitment is shown by him to achieve the declared target. The challenges faced by vaccinators include parents' refusal to have their children vaccinated, children missed during vaccination drives, the security of vaccinators and the malnourishment and immunity issues among a vast majority of children under five. According to BBC drop of 70 % has been recorded (www.bbc.com).

- Religious scholars hailing from multiple schools of thought assured their support in the cause to eradicate polio from the city in a meeting with Commissioner Syed Asif Hyder in February this year. It a religious obligation, the commissioner called for concentrated efforts for administration of the oral polio vaccine (OPV), particularly in light of the year's first case having been confirmed in the city (www.bbc.com).
- It was also agreed that total eradication of polio will also help in building a better image of the country globally, hence, needed to be given the attention it deserved.
- As necessary steps to ensure successful OPV campaigns in the city, the matter of addressing sensitive union councils (UCs) along with general areas was discussed.
- The scholars pledged to play their role in convincing the concerned inhabitants about the perils of the disease.
- As the threat to the polio vaccinators was high in the city and several innocent workers have lost their lives, the police and special commandos' squad has been provided to protect polio teams (JAMA, 2013).
- All over the country in the recent campaign more than 36 million children were administered to receive polio vaccine in last week of October 2016.
- In Karachi in 6 days polio campaign from October 24, 2016, Sindh Govt. provided high level of security and assigned 150 SSU unit commandos' in high risk areas for the security of health teams in Karachi (Jang Karachi, 2016; Dawn Karachi, 2016). This shows commitment of the state and provincial govt. for eradication of polio (www.unicef.com; www.bbc.com).

Political unrest, poor health infrastructure, and government negligence are the main reasons for poor fight against polio control in the entire country.

There is a poor public-sector funding, monitoring and supervision in the country in the health sector. The private sector is not being regulated properly. The lack of governmental transparency is also becoming a serious problem. All of these factors have contributed for low quality of public health services. Polio Eradication Initiative is funded by foreign

donors. But it has been delivered by the under-funded public infrastructure. Accountability of the organizations backing the campaign of the Polio Eradication has also expressed serious concerns.

The virus is also heightened because of the high population density and climate conditions. In order to control polio, increase in population should also be controlled including better and improved environment.

The spacing may be reduced to complete the vaccination schedule, transportation arrangement can prove in taking time from work. A cash payment for a day or two may improve attendance. Parents feel reluctant for risk of losing income or job entirely when getting children vaccinated during campaign days.

5. CONCLUSION

Malnourishment, frequent infections and the humid climate of an area can weaken some children's immune system and they are infected by the polio virus despite having been administered multiple doses of OPV. Parent's education is very important for getting their children vaccinated. The father's knowledge about health is the most determinant factor for getting their children immunized. Improved education, improves health more than even the provision of health services as proved in several studies. It's necessary and most important that the government must give very high attention to end polio by increasing the socio-economic status of the families living in remote areas. State must address the problems of the deprived communities/families that are having polio affected children, so that they can support them to live better.

6. RECOMMENDATIONS

- The government. must ensure supply of safe drinking water, clean healthy environment, and timely removal of solid waste from localities.
- The high population density and climate conditions must be controlled.
- Improving education will improve health than even the provision of health services.
- Rehabilitation and education provisions for polio affected children may help in eradication.

- There is a need for establishing more rehabilitation centers for affected children.
- A wide spread community/families awareness campaign is required for prevention and eradication.
- Awareness must be created through print and electronic media.
- Govt. must continue its political will to eradicate, by 2018 as committed to WHO/UNICEF and other international organizations.
- Govt. must ensure support of political, civil society, social, religious groups, parties and clerks.
- It is a preliminary study; there is a need for an in-depth study of health problems of polio affected children and their parents.

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A STUDY OF CURRENT PRACTICES USED FOR EDUCATING THE CHILDREN WITH AUTISM SPECTRUM DISORDER

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ABSTRACT

The major purpose of this study was to identify current practices used for educating the children with autism spectrum disorder (ASD) to enhance the effectiveness of educational outcomes. This study will provide guidelines to educate the students with ASD, help family members in getting access to special education and related services. This study aims to identify the curriculum and current practices for educating the students with ASD are being in used. Researchers have developed close ended questionnaire with five point criteria to carry out this descriptive type of research. The reliability of the instrument was 0.932. The special educationists, home based professionals and psychologists were included in population those who deals with the children with ASD. The researchers have conveniently selected a sample of sample of 105 teachers and psychologist from different schools of Lahore City, hospital and home based programs. Researchers personally collected data and analyzed it on SPSS by calculating Frequency counts and percentages as well as mean and standard deviation. The study revealed that Portage Guide, PECS, TEACCH and ABLLS curriculum are widely used to teach the children with autism. A few of respondents were using other curriculum as well. Evidenced based practices in curriculum are being used in private institutions rather than public institutions. To develop communication skills of children with autism prompting procedures and task analysis are were frequently used practices, many other practices were also in use according to a reasonable proportion of respondents like differential reinforcement, visual support and there are evidence based practices. On the other hand there are less practices are used to develop the social skills which is not a good sign for the education of children with ASD. So, it is recommended that there is need to have specific curriculum guidelines for children with ASD and teacher training institutes should organize short courses for parents and teachers to train their children with ASD.

Keywords: Children with Autism Spectrum Disorder, Social Communication Skills, PECS, ABI, TEACCH.

1. INTRODUCTION

Autism is one of the developmental disorders which adversely affect the communication and socialization abilities of children under the age of three. As per diagnostic and statistical manual on mental disorders fifth edition (DSMV) autism spectrum disorder (ASD) is associated with socio communication deficits, restricted repetitive behaviors along with sensory problems. Current epidemiological researches have established that incidence of ASDs is increasing more speedily than in the past. As a result, teaching and training of these children require more professional skills to be developed, parent involvement and related professionals are needed (e.g. speech, language and communication therapist, occupational therapist, physiotherapist etc.). Unfortunately, there is very little awareness about autism in Pakistan; similarly there are very few skilled professionals available in Pakistan. There are very few places where these children can be catered. It is very important to identify the effective and linguistic and cultural free diagnostic tools in Pakistan as well as to provide awareness to the population.

Multidisciplinary professionals face numerous challenges while educating students with autism. The success of different therapeutic remedies for children with autism is another dilemma reported in the literature regarding ASDs. Outcomes of treatment models are also facing the same issue. Normally, instructional strategies are designed for students with autism who have problems in verbal and non verbal expression and socialization, and exhibit repetition in behaviors (American Psychiatric Association, 2000; Volkmar, Lord, Bailey, Schultz, & Klin, 2004).

Ultimately, the students with ASD may require more individual attention, structured environment, and visual aid, and may need lesser stimulation than is suitable for the normal pupils (Attwood, 2000; Howard, Cohn, & Orsmond, 2006).

Two factors may be considered when deciding about suitable strategies for children with ASD: first, ASDs form a 'spectrum' so common intervention methodology is not applicable for these children because these individuals are influenced to varying degrees along various dimensions as well as it is very challenging to have students with same interests and abilities. Secondly, to choose the appropriate intervention from a wide range of empirically supported interventions is another issue

(Perry & Condillac, 2003; Roberts & Prior, 2006; Rose, Dunlap, & Kincaid, 2003; Schopler, Yirmiyu, Shulman, & Marcus, 2001).

Along with the phenomenon of disability preschool intervention programs for the children with autism show those contemporary approaches that a teacher may choose to engage students in learning. These strategies help teachers to meet specific learning objectives by keeping in mind the learning styles and development needs of the learners.

ASD affects differently to different children. This disorder changes the perceptions and behaviors of a person's about the environment. As ASD is a spectrum disorder so, some of its effectiveness are on mild level and some are of them having severe symptoms on the continuum and require different type of interventions (ddc.ohio.gov/Pub/ASDGuide.htm - 271k)

To date, researchers are still unknown to the precise etiology of autism. There is different hypothesis about the causative factors that's why there are different therapeutic and intervention strategies to accommodate the needs of children and youth with ASD, but are contentious, since the word "autism" is a "spectrum disorder", means that it manifests itself differently in each child. Due to unidentified causes of autism the management of the disorder is become extra ordinary difficult. There are so many different schools of thoughts from which to view treatment such as developmental, behavioral, educational, cognitive and medical. These viewpoints overlap, but each put emphasis on different things (Seigle, 2003).

A broad assortment of techniques and approaches is available to assist the teaching and learning process of students with ASD around the world. Integrating a variety of approaches leads to the development of programs that promote the best outcomes for students with ASD. The National Research Council (2001) is of the view that not any single intervention technique is successful for all individuals with ASD and that the combination of various approaches helps for developing programs that produce the best results for children with ASD.

Here some of the most effective and commonly used strategies are given below:

The Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) program is one of the most applicable intervention programs. Eric Schopler has introduced this program as internationally used approach requiring collaboration between parents and professionals (Schopler, 1994). The effectiveness of the program is established by many research studies about children with autism and intellectual and developmental disability (ID; Panerai, Ferrante & Caputo, 1997 & 1998) in reducing self-injurious behaviors (Norgate, 1998) in high-functioning autistic students with Asperger syndrome (Kunce & Mesibov, 1998) and in individuals who are entering the job market through support program (Keel, Mesibov & Woods, 1997). Ozonoff & Cathcart (1998) studied the effects of household programs on pre-school children, results showed that experimental group which was treated by TEACCH was better than that of the control group on the basis of some Psycho-Educational Profile – Revised (PEP-R; Schopler, Reichler, Bashford, Lansing & Marcus, 1990) subtests, i.e. imitation, gross and fine motor skills, and non-verbal concepts.

The TEACCH program was specially tailored for population with ASD: the key symptoms and characteristics of the disorder were taken in to account and attempts to reduce the child's problems by using structured and constant intervention, environmental adaptations, and alternative communication training (Schopler, 1994). Children with this disorder face greater challenges in decoding the environment while non-autistic children easily and naturally develop this ability (Peeters, 1994). ASDs have deficiency in theory of mind that's why they have a greater challenge to comprehend intangible concepts, body language, sign and symbols, the meaning of imitation, interpersonal relationships, time passing and the 'how-when-where-why' of events. The TEACCH approach has converted these abstract concepts in to reality and makes them obvious and predictable by using visual aids.

According to Education for All (Ontario Ministry of Education, 2005a), teachers can respond to a learner's needs and strengths in an effective manner through the use of differentiated instruction. Through DI, the targeted skills or difficulties of students with ASD can be handled via a variety of methods to differentiate.

To enlist the most useful strategies for students in a learning environment, it is compulsory to focus the learning goals for the student in the context what do we want the student to learn? What essential skills the student to learn? Why is the student learning those skills? How does the learning goal fit into the goals classified in the IEP for the student? And how will the student best achieve those goals? What type of tasks, materials, and supports are suitable for the student? How will the student express learning?

To DI, teachers should consider curriculum and instructional modification according to the learning profile of students. It requires continuous monitoring and evaluation and data from assessments and observations should be used to select effective instructional method for future decisions.

The visual support is generally recommended strategies for ASD teaching than information that is presented verbally. Speech is momentary: the students must recall information presented to them verbally. Visuals are mainly used to improve communication, provide verbal information, organize or schedule life skills, presenting content and skills (Hodgdon, 1999; Quill, 1995).

There is a behavior-communication visual link: The causes of behavior difficulties are frequently related to communication difficulties; problems in understanding and/or difficulty with expression. The remedy to improve behavior is improving communication. The method is using visual strategies to support communication” (Hodgdon, 1999).

These are two effective methods of visual support: Passive modeling (Biederman, Fairhall, Raven, & Davey, 1998) and Video modeling (Bellini & Akullian, 2007).

All children perform better in familiar environment. Students with ASD need an organized learning environment to know what is anticipated of them in specific contexts, to assist them in predicting what comes next, and to learn and generalize a number of skills (Iovannone, R., Dunlap, G., Huber, H., & Kincaid, D.2003). Rules and expectations should be clear-cut, persistent and include particular information about the projection for appropriate behavior. The organization of physical environment is very important, for example seating position needs to be constant and location

with low visual and sensory distractors. Developing as much consistency as possible in the context, routine schedules, and teaching routines that may enhance the ease level and decrease pressure for students with ASD.

An approach is delineated in Policy/Program Memorandum No. 140 (2007) titled, “Incorporating Methods of Applied Behavior Analysis (ABA) into Programs for Students with Autism Spectrum Disorders (ASD)”. ABA is based on scientifically approved methods of learning and behavior modification. In this approach, the behaviors to be modified are vividly defined and recorded and the consequences and reinforcers are analyzed comprehensively to develop desirable behaviors. For developing apt behaviors, interventions based on behavior and learning are designed and implemented and their progress is evaluated and necessary changes are made if required (adapted from Perry, A. & Condillac, R., 2003). ABA can be used as an instructional technique for students of every age. It can be designed and implemented to modify single or more behaviors at one time and with varying levels of intensity along a spectrum. ABA is useful for all types of learning as in social, behavioral, academic, self-care and communication. An instructional approach in combination with ABA focuses on measuring and finding behaviors over time, targeting behaviors, and modifying those behaviors through intervention. Student progress is measured through ongoing assessment and evaluation. The final goal of this whole process is the generalization of the learned skills and modified behaviors to the environmental settings.

Ontario Ministry of Education (2005a) focusing on Education For All put emphasis on assistive technology (AT); defined “as any technology that allows one to increase, maintain, or improve the functional capabilities of an individual with special learning needs “(Edyburn, 2000). The applications of AT will help to make the environment according to the learning mode of the individuals with ASD and will increase the probability of teach (Judge, 2001). AT has wide range of its devices from high tech to low tech; computerized devices such as speech generating software to the resources such as visual supports. AT will be used for providing different methods to access information, to understand the environment and to perform task.

The significance of the AT for students with ASD was studied in British Columbia (Randle, 2005) conducting a survey to recognize a wide range

applications of AT which include supporting the following; written output, academic concept development, motivation, communication, the development of social skills.

As students with ASD have diversified educational needs, it is vital to evaluate each AT in accordance of students need and then apply for accommodating his or her needs. AT has its potential benefits for individual or student with ASD. For example, technology can be used to enhance support communication and fine motor skills and other functional abilities (Ontario Ministry of Education, 2007).

Keeping in view the sensitivity and importance of issues related to provide guidelines to educate the children with autism, assist family members in obtaining access to resources, services, and basic necessities. And assist teachers and parents in advocating for the identified child's needs across the lifetime, it was imperative to conduct a study on identifying current practices used for educating the children with autism in Lahore city.

2. METHOD

The type of research was descriptive. Researchers have followed the following procedure to complete the study:

2.1 Population of Study

The population of the study was consisted on teachers working with children with autism in public and private sector schools, hospitals and home based settings of Lahore city.

2.2 Sample of the Study

By using convenient sampling technique researchers have selected a sample of 105 teachers working with children with autism (males= 20, females= 85) from different schools, hospital and home based programs. Out of 105 teachers, 22 (21.0%) were taken from Amin Maktab, 03 (2.9%) were taken from Govt. Shadaab Training Institute, 18 (17.1%) were from Autism Institute of Pakistan, 35 (33.3%) were from Rising Sun Special Education Center, 15 (14.3%) were from Home Based Programs and 12 (11.4%) were from Combined Military Hospital. As per qualification, (73.3%) respondents were M.A in Special Education, (22.9%) were MSc in Psychology, (2.9%) were B.Ed in Special Education and(1.0%) were

intermediate. Majority of respondents (73.3%) were M.A in Special Education.

2.3 Instrumentation

After reviewing the related literature and consulting with different schools teachers of students with autism, psychologists and home based professional, a questionnaire with close ended options was developed. The questions were related to curriculum used for educating the children with autism, current practices used for educating the children with autism for communication and social skills. The professionals who deal with autistic children were asked to respond on five point criteria and responses in the questionnaire are coded as No.1 = Never, No.2= Rare, No.3= Sometimes, No.4= Mostly, No.5= Always. The reliability of the instrument was 0.932 (Cronbach alpha).

2.4 Data Collection Procedure

After obtaining formal consent from the concerned schools, hospitals and home based programs, where these students with autism were enrolled, the questionnaires were administered. The statements of the questionnaire were read to teachers, psychologists and home based professionals of students with autism and their responses were marked on the questionnaires by the researchers. Frequency counts and percentages as well as mean and standard deviation were used for analysis.

3. FINDINGS

Table 1
Curriculum used for educating the children with autism (n=105)

Statements	Frequency	Percentage
Use of ABLLS for goal setting to teach the children with autism	59	56.2
Use of portage guide for goal setting to teach the children with autism	72	68.6
Use of Carolina curriculum to teach the children with autism	90	85.7

Use of Katharine Morse curriculum to teach the children with autism	89	84.8
Use treatment and education of autistic and communication related handicapped children(TEACCH) for children with autism	60	57.1
Use of Links to language curriculum to teach the children with autism	53	50.5
Use picture exchange communication system (PECS) to develop language of children with autism	71	67.6
Use of the assessment of functional living skill to teach the children with autism	79	75.2
Use of Autism Skill Acquisition Program (ASAP) to teach the children with autism	83	79.0
Use of Verbal Behavior to teach the children with autism	66	62.9
Use of floor times to teach the children with autism	66	62.9
Use of any other curriculum to teach the children with autism.	86	81.9

Table 1 shows that majority of the respondents 59 (56.2%) use of ABLLS curriculum for goal setting for to teach the children with autism. 72 (68.6%) respondents use of portage guide for goal setting to teach the children with autism. 90 (85.7%) respondents replied that they do not use of Carolina curriculum to teach the children with autism. 89 (84.8%) respondents replied that they do not use of Katharine Morse curriculum to teach the children with autism. 60 (57.1%) respondents replied that they use treatment and education of autistic and communication related handicapped children(TEACCH) for children with autism. 53 (50.5%) respondents replied that they do not use of Links to language curriculum to teach the children with autism. 71 (67.6%) respondents indicated that they use picture exchange communication system (PECS) to develop language of children with autism. 79 (75.2%) respondents replied that they do not use of the assessment of functional living skill to teach the children

with autism. 83 (79.0%) respondents replied that they do not use of Autism Skill Acquisition Program (ASAP) to teach the children with autism. 66 (62.0%) respondents replied that they do not use of Verbal Behavior to teach the children with autism. 66 (62.9%) respondents indicated that they do not use of floor times to teach the children with autism. 86 (81.9%) respondents replied that they do not use of any other curriculum to teach the children with autism.

Table 2
Current Practices Used for Educating the Children with Autism to Improve Communication Skills:

Statements	Frequency	Percentage
Use of Picture exchange communication system	35	33.3
Use of Antecedent based intervention	29	27.6
Use of Differential reinforcement	40	38.1
Use of Discrete trail training	32	30.5
Use of Functional behavioral assessment	40	38.1
Use of Functional communication system	34	32.4
Use of Naturalistic intervention	38	36.2
Use of Pivotal response training	50	47.6
Use of prompting procedures	54	51.4
Use of Task analysis	52	49.5
Use of time delay strategy	30	28.6
Use of Visual support	33	31.4
Use of Video modeling	32	30.5
Use of Teach to listen strategy	33	31.4
Use of developing oral language comprehension	37	35.2
Use of Incidental teaching	31	29.5
Use of Natural paradigm	52	49.5

Use of Mand modeling	38	36.2
Use the practice of to take pause between the words	28	26.7
Use the practice of Accept restricted behaviors as communication	34	29.3
Use of Immediate echolalia as a teaching tool	38	36.2

Table 2 shows that reasonable proportion of respondents (33.3%) answered that “picture exchange communication system” is mostly used. Few of respondents (27.6%) answered that “Antecedent based intervention” is mostly and always used. Reasonable proportion of respondents (38.1%) answered that “Differential reinforcement” is always used. Few of respondents (30.5%) answered that “discrete trail training” is always used. Reasonable proportion of respondents (38.1%) answered that “functional behavioral assessment” is always used. Reasonable proportion of respondents (32.4%) answered that “functional communication” system is always used. Reasonable proportion of respondents (36.2%) answered that “naturalistic intervention” is never used. Almost half of respondents (47.6%) answered that “pivotal response training” is never used. Majority of respondents (51.4%) answered that “prompting procedures” is always used. Almost half of respondents (49.5%) answered that “task analysis” is always used. Few of respondents (28.6%) answered “time delay strategy” is never used. Few of respondents (31.4%) answered that “visual support” is always used. Few of respondents (30.5%) answered that “video modeling” is never used. Few of respondents (31.4%) answered that “teach to listen strategy” is mostly used. Reasonable proportion of respondents (35.2%) answered that developing “oral language comprehension” is mostly used. Few of respondents (29.5%) answered that “incidental teaching” is mostly used. Half of respondents (49.5%) answered that “natural paradigm are never used. Reasonable proportion of respondents (36.2%) answered that “mand modeling” never used. Few of respondents (26.7%) answered that “to take pause between the words” never used. Few of respondents (29.3%) answered that “accept restricted behaviors as communication” is never used. And reasonable proportion of respondents (36.2%) answered that “immediate echolalia as a teaching tool” is never used.

Table 3
Current practices used for educating the children with autism for the improvement of social skills:

Statements	Frequency	Percentage
Use of Video based instructions	34	32.4
Use of Observation learning strategy	42	40.0
Use of Vivo modeling	59	56.2
Use of Antecedents interventions	27	25.7
Use of Social stories	29	27.6
Use of Self-management strategy	31	29.5
Use of Peer mediated interventions	44	42.3
Use of Pivotal response training	55	52.2
Use of model appropriate social behavior	56	53.3
Use of Narrate play	59	56.2
Use of cognitive picture rehearsal	32	30.5
Use of supporting the development of friendship	27	25.7
Use of teaching key social rules	33	31.4
Use of integrating plays groups	35	33.3
Use of Role playing	32	30.5
Use of Video and audio taping	42	40.0
Use of individualized visual social rules card taping	50	47.6
Use of Comic strip strategy	59	56.2
Use to provide opportunities to participate and interact in variety of environments	39	37.1
Use of Explicit teaching	49	46.7
Use of Social ecological model	64	61.0
Use of ECHOES game for social interaction	60	57.1
Use of Sun rise program	44	41.9
Use of Script fading	75	71.4
Use of Social dramatic play	73	69.5
Use of Thematic fantasy play	75	71.4

Use of Sign language	71	67.6
Use of speech generating devices	70	66.7

Results shows that reasonable proportion of respondents (32.4%) answered that “video based instructions” are sometimes used. Reasonable proportion of respondents (40.0%) answered that “observation learning strategy” is mostly used. Majority of respondents (56.2%) answered that “vivo modeling” is never used. Few of respondents (25.7%) answered that “antecedents interventions” rare and (25.7%) answered is always used. Few of respondents (27.6%) answered that “social stories” never used. Few of respondents (29.5%) answered that “self-management strategy” is never used. Reasonable proportion of respondents (42.3%) answered that “peer mediated interventions” never used. Majority of respondents (52.2%) answered that “pivotal response training” is never used. Majority of respondents (53.3%) answered that “model appropriate social behavior” is never used. Majority of respondents (56.2%) answered that “narrate play” is never used. Few of respondents (30.5%) answered that “using cognitive picture rehearsal” is never used. Few of respondents (25.7%) answered that “supporting the development of friendship” is never used. Few of respondents (31.4%) answered that “teaching key social rules” is mostly used. Reasonable proportion of respondents (33.3%) answered that “integrating play groups” are never used. Few of respondents (30.5%) answered that “role playing” is never used. Reasonable proportion of respondents (40.0%) answered that “video and audio taping” is never used. Almost half of respondents (47.6%) answered that “individualized visual social rules card taping” is never used. Majority of respondents (56.2%) answered that “comic strip strategy” never used. Reasonable proportion of respondents (37.1%) answered that to “provide opportunities to participate and interact in variety of environments” are never used. Almost half of respondents (46.7%) answered that “explicit teaching” is never used. Respondents (61.0%) answered that “social ecological model” is never used. Majority of respondents (57.1%) answered that “ECHOES game for social interaction” is never used. Reasonable proportion of respondents (41.9%) answered that “Sun rise program” never used. Majority of respondents (71.4%) answered that “script fading is never used. Majority of respondents (69.5%) answered that of “social dramatic play” never used. Majority of respondents (71.4%) answered that “thematic fantasy play” is never used. Majority of respondents (67.6%) answered that “sign language” is never used. And majority of respondents

(66.7%) answered that “speech generating devices (voice output communication assistance, VOCA” never used.

4. CONCLUSION

The study revealed that Portage Guide, PECS, TEACCH and ABLLS curriculum are widely used to teach the children with autism. A few of respondents use other curriculum as well. Evidenced based practices in curriculum are being used in private institutions rather than public institutions. To develop communication skills of children with autism prompting procedures and task analysis are always used practices many other practices are also in use according to a reasonable proportion of respondents like differential reinforcement, visual support and there are evidence based practices. On the other hand there are less practices are used to develop the social skills which is not a good sign for the education of children with autism.

5. RECOMMENDATIONS

The following recommendations are given on the basis of major findings:

1. Autism is not widely known in Pakistan. There is need to create awareness campaign regarding autism for parents, teachers, professionals and other community members.
2. There is a strong need to motivate male teachers to come forward in the field of autism. Because majority of professional who deals with students with autism are female.
3. Different curriculums have been used by teachers to teach children with autism. So, there is need to have specific curriculum guidelines for children with autism.
4. Pre service training should be organized by public and private institutions in field of autism.
5. Most of children with autism are enrolled in schools of children with mental retardation. So, separate institutions should be established to accommodate needs of children with autism.
6. In autism socialization deficit interferes with community involvement of the child with autism. Child is unable to make relationship and cope in the profession. Findings show that treatment in the area of socialization is very poor. It is recommended that social skills training approaches should be taught to professionals.

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AN ACTIVITY BASED LEARNING MODEL FOR TEACHING OF SOFT SKILLS TO PROSPECTIVE TEACHERS

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ABSTRACT

A qualified competent teacher requires mastery in both hard as well as soft skills. In Pakistan, teacher education primarily focuses on hard skills. This study has developed an Activity Based Learning (ABL) model using an embedded approach for teaching of soft skills to the prospective teachers while teaching the “Curriculum Development” course of M. A. Education degree program in two consecutive academic sessions (Fall 2009 & Fall 2010), sample of the study consists of 182 students, 34 male and 148 female. The proposed model has four learning components and four activity components. In addition to the classroom activities, the proposed model has implemented using a real-life activity - Planting, Growing and Harvesting Potato Crop. The participants’ attitude towards the activity and their soft skills development was measured through a questionnaire and the researcher’s observation. The results show that the proposed model is very effective for developing the soft skills of prospective teachers.

Key words: Activity Based Learning Model, Student Centered Learning, Soft Skills Development

1. INTRODUCTION

Teachers are considered the designers of students' future (Mascarenhas, 2015) and catalytic agents of change (Kumari, 2014). They are responsible for developing highly skillful and trained workforce with good values and understanding power (Sasi and Anna, 2011; Balakrishnan & Raju, 2015); hence may be considered as the driving force of socio-economic development of nations (Ramsden, 2003; Little, et. al., 2007; Hendarmana and Tjakraatmadjab, 2012). Drucker (1999) has predicted that the most valuable asset in today's knowledge economy will be well-educated and skilled people (knowledge workers) and their productivity. Yet, the productivity and employability of knowledge workers depend on the quality of education and training received from their teachers. Darling-Hammond (2006) states, "teachers' abilities are especially crucial contributors to students' learning"(p1). She further maintains, "Teachers need not only to be able to keep order and provide useful information to students, but also to be increasingly effective in enabling a diverse group of students to learn ever more complex material." (p1) President Obama has called for American schools, "Now more than ever, the American economy needs a workforce that is skilled, adaptable, creative, and equipped for success in the global marketplace" (USA, 2016). Such pressing demands, on the one hand, have made teaching profession more challenging and demanding; on the other hand, have introduced a set of new skills, values, and competencies.

For example, in her article "Constructing 21st-century Teacher Education", Linda Darling-Hammond of Stanford has articulated an array of teachers' characteristics, including understanding of individual learning styles, knowledge of socio-cultural sensitive pedagogical content, effective use of technology, desire of lifelong learning, strong communication and efficient activity management skills (Darling-Hammond, 2006). Similarly, in a critical review of the literature on 21st century knowledge frameworks with reference to teachers and teacher educators, Kereluik et al. (2013) have identified three broad categories of knowledge teachers must possess to succeed in the 21st century: (i) Foundational Knowledge with three key subcategories: Core Content Knowledge, Digital Literacy, and Cross-Disciplinary Knowledge. (ii) Meta Knowledge with three subcategories: Problem Solving & Critical Thinking, Communication & Collaboration, and Creativity & Innovation. (iii) Humanistic Knowledge with three subcategories: Life/Job

Skills/Leadership, Cultural Competence, and Ethical/Emotional Awareness. Likewise, the review of *21st Century Skills for Students and Teachers* conducted by the Pacific Policy Research Center (2010) maintains, "...technology is transforming how we learn and the nature of how work is conducted and the meaning of social relationships. Shared decision-making, information sharing, collaboration, innovation, and speed are essential in today's enterprises ... much success lies in being able to communicate, share, and use information to solve complex problems, in being able to adapt and innovate in response to new demands and changing circumstances, in being able to command and expand the power of technology to create new knowledge." These new demands have made the task of teachers quite challenging; hence, prospective teachers must receive an education of the highest quality for their holistic development (Kumari, 2014).

1.1 Quality of Teacher Education

The quality of Education remains an important agenda of great concern globally (Tawil, 2012; EC, 2013). In its report on 'Improving the Quality of Teacher Education' Commission of the European Communities insists, "Ensuring a high quality of Teacher Education is ... important ... to secure sound management of national resources and good value for money". The Human Rights Council's report on the right to education states that quality in education is crucial to poverty alleviation and individual empowerment (Singh, 2012). Although there appears to be a lack of conceptual clarity about what constitutes quality teaching (Wang, 2011), Jusuf (2005) argues that achieving quality in education requires effective and inspiring teachers. An effective and inspiring teacher is one who got mastery in both hard as well as soft skills (Subramaniam, 2013). Hard skills encompass pedagogical theories and teaching methodologies. Pedagogical theory enables teachers to understand all the sociological, psychological and philosophical aspects involved in the teaching-learning process. Teaching methodologies enrich teachers' knowledge with various approaches, techniques and strategies related to instructional planning, content preparation, delivery, assessment, evaluation, and academic management. Soft skills encompass personal skills, like personality traits, ethics, morality, and social skills that help teachers to execute their social and professional responsibilities effectively (Mascarenhas, 2015; Krneta et al, 2007).

Obanya (2014) comments, “Thus, the challenge for the Education system goes beyond merely getting qualified teachers; the major task ahead is that of producing mass of effective and inspiring teachers” (Obanya, 2014, p. 440). This task of producing effective and inspiring teachers demands quality oriented teacher education which ensures the development of prospective teachers’ soft as well as hard skills (Wang, 2011). In parallel, the challenges of globalization and newly emerging knowledge societies have further intensified the importance of soft skills (Tarman, 2010).

1.2 Soft Skills

Soft skills have been considered the backbone of teachers’ professional responsibilities (Anand, 2013). A good command on soft skills makes the teaching-learning process meaningful and effective (Farooqi, 2013; Pachauri & Yadav, 2014; Crosbie, 2005). Soft skills help teachers to handle sociological, psychological, and professional aspects more effectively and profoundly (Malmqvist, et. al., 2008; Pachigalla and Dharmarajan, 2013; Eggen and Kauchak [23]; Erik & Piet, 2007). The level of competency in both soft and hard skills shows teachers’ readiness, comprehension, knowledge, and attitude. Therefore, the development of soft and hard skills should be the ultimate goal of teacher education (Gibbs and Coffey, 2004; Fulton, 2006; Farooqi, 2013).

Soft skills - commonly referred to as "21st Century Skills" - are a comprehensive concept related to the ability and the capability of individuals required for professional competence (Erik & Piet, 2007). In literature, soft skills are defined in multiple perspectives. Robbins and Hunsaker (1996) defined soft skills as “a system of behaviour that can be applied in a wide range of situations”. From the cognitive point of view, Little, et. al. (2007) relate soft skills with non-academic aspects such as positive values, leadership qualities, teamwork, communication skills, etc. BalaKrishnan & Raju (2015) relate soft skills with personal attributes that drive one’s potential for social interactions, job performances and career prospects for sustainable growth. World Health Organization (WHO, 2003) declares soft skills as Psychological Skills which enable individuals to deal with the demands and challenges of everyday life. Griffin, et al., (2012) relate soft skills to a broad set of knowledge, skills, work habits, and personal traits that are considered highly important for success in today’s world, especially in modern workplace settings.

There is no universally accepted list of soft skills available in the literature. The U.S. Department of Labor has identified six key soft skills for workplace success: communication, enthusiasm and attitude, teamwork, networking, problem solving and critical thinking, and professionalism (ODEP, 2015). WHO's list of soft skills includes self-awareness, self-esteem, critical thinking, decision making, problem solving, interpersonal, communication, empathy, coping with emotions, handling peer pressure and negotiation. The Ministry of Higher Education Malaysia (2006) announced seven important soft skills of teaching professional: i) *Communication skills* – to make teachers able to convey their thoughts clearly and confidently; ii) *Critical thinking and problem solving skills* - to make teachers able to identify and analyze complex situations and present alternative solutions and new ideas; iii) *Team work skills* - to make teachers able to work collaboratively while respecting others' attitude, behaviour, and belief; iv) *Lifelong learning and information management skills* - to make teachers able to carry out independent learning and find relevant information from multiple sources; v) *Entrepreneurship skill* – to make teachers able to craft innovative self-employment or work-related sustainable opportunities while managing risk factors; vi) *Ethic and professional Practices* - to make teachers able to observe high work standards and moral & ethical values, and respect socio-cultural aspects of the community; vii) *Leadership skill* – to make teachers effective in dealing with students, parents, administration; in maintaining discipline and resources in their classrooms.

1.3 Teaching of Soft Skills

Different approaches have been proposed in literature for the teaching of soft skills. Pachauri & Yadav (2014) have discussed two models for the teaching of soft skills: (i) stand alone – developing soft skills through specific courses, and (ii) embedded - embedding the teaching of soft skills activities across the curriculum. Embedded model focus on student centered learning which can be supplemented with academic as well as non-academic activities. In literature, a number of student centered learning methods of teaching are reported, e.g. Activity Based Learning (Prince, 2004), Problem-Based Learning (Edens, 2000), Project Based Learning (Diehl, et. Al., 1999), Collaborative Learning (Bruffee, 1993), Case-Based Learning (Barnes, 1994).

Activity-based learning (ABL) is a teaching-learning method in which students are actively involved in their learning process (Prince, 2004). Rather sitting as passive listeners, they become active participants in the learning experience. According to Suydam, et. al (1977), it is a learning process which frequently involves the use of manipulative materials for encouraging students' active participation in doing or in seeing something done. Many studies have reported that the ABL is useful in strengthening students' soft skills, like developing higher order thinking skills (Polanco et al., 2004; Zareen, et. al., 2014), improving long-term retention (Norman and Schmidt, 1992), enhancing students' information management skills (Kaufman and Mann, 1996), handling complex situations (Martin et al., 1999), developing thinking and problem-solving skills (Gallagher, et. al., 1992), developing students' habit of reflection keeping (Karuna & Vinita, 2014), enhancing students' confidence and judging alternatives for solving problems (Dean, 1999), improving self-directed learning, higher level thinking, and interpersonal skills (Schmidt, et. al., 2006), teaching how to learn through different activities and real-life problems (Boud & Feletti, 1999), enhancing communication skills of ESL primary students (Aslam, et. al., 2015). Considering the outcome of these studies, this study aims to explore the potential of ABL approach for strengthening the soft skills of prospective teachers while teaching the "Curriculum Development" course at a teacher education institution in Pakistan.

The review of literature revealed that in teaching profession soft skills are equally important as hard skills. Hence, the teacher education ensures that prospective teachers must develop the competencies required in the teaching profession. In countries like India and Pakistan, teacher education follows a textbook-based curriculum which mainly focuses on the development of prospective teachers' hard skills (Ameeta & Purohit, 2005). Nurturing of soft skills is covered in the form of co-curriculum and extra co-curriculum which would not be considered adequate for developing the required level of soft skills. However, the development of soft skills needs a systematic and effective way (Subramaniam, 2013) which demands for appropriate reforms in the teaching-learning process. Many researchers from other parts of the world have used Activity Based Learning for strengthening students' soft skills. The review of literature reveals that no major study has been carried out in Pakistan to explore the potential of ABL approach for strengthening the prospective teachers' soft skills. This research gap has crafted a justification for this study. Hence,

the author has planned to conduct this study. This study aims to develop a clear understanding on the following research questions: Which activity based model could be used for strengthening prospective teachers' soft skills? What kind of activity would be appropriate for strengthening prospective teachers' soft skills? Which evaluation model would be suitable for characterizing participants' attitude and behavior during the activity? What are the effects of ABL on students' soft skills development?

2. METHODOLOGY

This study, carried out in two consecutive academic sessions (Fall 2009 & Fall 2010), is conducted at a teacher training university, Lahore, Pakistan. Sample of the study consists of 182 students, 34 male and 148 female, enrolled in "Curriculum Development" course of M. A. Education degree program.

Table 1: Gender Distribution of the Prospective Teachers		
Session	Male (34)	Female (148)
Fall-2009 (2 classes)	9	41
	11	39
Fall-2010 (2 classes)	9	43
	5	25
Total	182	

This research was carried out to achieve following objectives.

What kind of activity would be appropriate for strengthening prospective teachers' soft skills? Which evaluation model would be suitable for characterizing participants' attitude and behavior during the activity? What are the effects of ABL on students' soft skills development?

1. To develop an activity based learning model for strengthening the participants' soft skills
2. To select a suitable activity which allows implementing the newly developed activity based learning model.

To achieve these objectives, following research questions were devised:

- What is the best way to implement the newly developed activity based learning model while teaching the “Curriculum Development” course?
- What kind of activity would be appropriate for strengthening prospective teachers’ soft skills?
- Which evaluation model would be suitable for characterizing participants’ attitude and behavior towards the newly developed model?
- What are the effects of the newly developed activity based learning model on students’ soft skills development?

2.1 Theoretical Framework

“Curriculum Development” is a compulsory course of teacher education which aims to teach concepts, principles, models, and various processes of curriculum development. Teaching-learning activities based on traditional lectures, tutorial classes, and formal examinations. It makes the course boring, monotonous, and unexciting. Consequently, students show a very passive and unmotivated attitude. Also, the course does not have any component aiming to promote students’ soft skills.

To promote the participants’ soft skills, academic understanding, and making teaching-learning process more interactive, interesting, effective and creative, in addition to the classroom teaching, it was decided to develop a new model which uses embedded approach for implementing ABL approach. According to Constructivist, learning should be arranged around activities that supports knowledge construction rather just knowledge transmission (Jonassen, 1999). So, the most crucial component of the proposed model was the selection of an activity which could set the stage to achieve the above mentioned objectives. In this regard following aspects were considered:

The model:

- contains a real-life activity;
- offers an activity which matches with participants’ social-cultural background;
- provides opportunities for hands-on tasks, interpersonal communication, thinking & problem solving, constructive investigation, knowledge sharing, information management, teamwork & leadership.

From learning prospective, it was decided that the proposed model must provide ample opportunities for:

- i) ***Experiencing*** through observing, comparing, feeling, listening, talking, discussing, imagining, investigating, reporting;
- ii) ***Memorizing*** through different modes of perception, finding regularities and patterns, connecting new experiences with previous knowledge;
- iii) ***Understanding*** through planning, predicting, judging, evaluating, interpreting, explaining, and applying knowledge and constructing their own knowledge constructs;
- iv) ***Socializing*** through developing a happy relationship between participants and participants, teachers and participants.

The next research area was the selection of a real-life activity which could meet the above mentioned criteria and keeps the participants fully engaged, motivated, imaginative, and creative. Reeves, Herrington, & Oliver (2002) have identified ten characteristics of authentic activities: (i) activities have real-world relevance, (ii) activities are ill-defined, (iii) activities comprise complex tasks to be investigated by students over a sustained period of time, (iv) activities provide the opportunity for students to examine the task from different perspectives, using a variety of resources, (v) activities provide the opportunity to collaborate, (vi) activities provide the opportunity to reflect, activities can be integrated and applied across different subject areas and lead beyond domain-specific outcomes, (viii) activities are seamlessly integrated with assessment, (ix) activities create polished products valuable in their own right rather than as preparation for something else, (x) activities allow competing solutions and diversity of outcome.

It has been observed that conventional classroom activities do not meet the above mentioned criteria. Also, they were not as effective as require in this research, so it was decided to select an activity from real-life, which, in addition to above mentioned characteristics, i) matches with participants' socio-cultural background, ii) must be safe, relevant, engaging, and offers a sense of belonging, iii) provides a friendly environment for participants'

independent learning and socialization. As the majority of participants were with an agricultural background, it was decided to engage participants in a real-life multi-stage learning activity; “Planting, Growing and Harvesting Potato Plants”. Duration of the selected activity was 18 weeks. All the stages of activity were monitored and evaluated.

The next research area was the implementation of the proposed model. This stage can be divided into four important components:

(i) **Preparation** covers the selection of learning objectives, learning material, activity guidelines, assessment methods, and academic integrity guidelines, (ii) **Support** covers selection of motivation & counseling techniques, setting up social networking and on-line forums, planning of formal discussions & lectures, arrangement of resource persons, organization of field-work resources, and preparation of frequently asked questions(FAQs); iii) Execution focuses on the development of participants’ soft skills and hard skills, (iv) **Evaluation** is the most important component of the proposed model. It allows driving the factors that led to either success or failure of the proposed model. The proposed model has adopted the Kirkpatrick’s multi stage stages evaluation model (Forsyth et al., 1999). The first stage evaluates the participants’ feelings and opinions about the activity; the second stage evaluates the changes in participants’ knowledge attitudes and skills; the third stage evaluates the extent to which learners apply the knowledge. In addition, the proposed model takes into account the participants’ interaction as the key source of their social, intellectual, sensory, and physical learning. Evaluation has also been carried out through reports & assignments, discussion & seminars, log-book & portfolio, individual & group presentations and participation. The proposed model is shown in Figure 1.

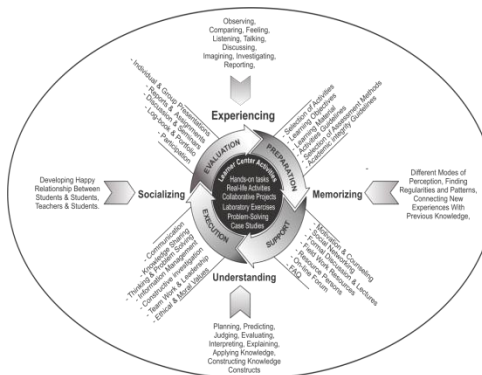


Figure 1: Student Centered Activity Based Learning Model

The next aspect to address was to find a way how well the newly developed model would be working. In this regard, the data collecting of

participants' attitude, interaction, the level of involvement, and the overall impact of the activity on their skills was very crucial. In qualitative research, observation has commonly used as a tool for data collection (Kawulich, 2005). In the researcher used her observation to monitor the participants' self-assessment, their level of participation in the multi-stages of activity, their behavior towards each other, and their attitude towards socialization & knowledge attainment. In addition, using the Likert scale of five ranging between "strongly agree" and "strongly disagree" (Oppenheim, 1966), a questionnaire was designed to get the participants feedback. The questions were divided into two banks. Questions of the first bank address the following areas to characterize participants' behaviour during the activity execution:

1. opinion about activities (interesting/productive/wastage of time/useful experience)
2. participation in activities, group discussions, individual and group presentations;
3. sharing of information, experiences, and ideas with peers;
4. getting help of instructor or peers during activity;
5. attitude towards asking questions if find difficulties regarding activity;
6. attitude towards individual/group assignments;

Questions of the second bank address following areas to characterize participants' Soft Skills development. The inventory of soft skills used in this research is adopted from Aworanti, Taiwo & Iluobe (2016). These include:

1. Assertiveness (Confidence)
2. Inter-personal communication
3. Emotional management (emotional expression and emotional assessment of oneself and of others)
4. Self-control
5. Self-esteem
6. Self-motivation
7. Social relations management
8. Stress management
9. Empathy
10. Happiness and optimism
11. Time keeping
12. Organization/planning

13. Helping others
14. Adaptability/flexibility
15. Thinking & problem solving
16. Constructive investigation
17. Knowledge sharing
18. Information management
19. Team working & leadership

2.2 Procedure

This research is carried out to find out the effect of ABL approach on strengthening the participants' soft skills while teaching the "Curriculum Development" course. For this, in addition to regular classes, the students were engaged in a learning-by-doing activity – Cultivating, Planting, Growing, and Harvesting Potato Crop. At the start of the activity, the participants were educated about the activity, its' aims & objects, and the assessment methods going to be used for evaluation. They were also been educated about the necessary preparation and pre-cautionary measures required for cultivation, growing and harvesting of potato Crop. The participants also collected information about the activity from the Internet.

Next, the participants, as a team, selected a suitable place for the activity and made the necessary preparations. Although the participants worked in small groups, but each participant planted his/her seed. Every week in a group discussion, in the presence of the researcher, the participants shared their experiences and explore how these experiences help them to augment their understanding of "Curriculum Development" course. They also reviewed how these experiences have promoted their soft skills. At the end of each session, the researcher gave her feedback and provided guidelines to proceed further.

At the end of the activity, after harvesting the potato plants, every group delivered a presentation and submitted a report narrating their learning experiences. They also filled the research questionnaire. During the activity, each participant was asked to maintain an activity journal for recording his/her observations and learning experiences. The researcher also maintained her research diary to record her observation.

3. Findings

The responses related to characterizing participants' behaviour during the activity is summarized in Table 1. The responses characterizing participants' soft skills are summarized in Table 2. The data reported in these tables clearly demonstrates that the participants overwhelmingly found ABL beneficial for them.

Table 1
Participants' responses characterizing their behaviour
during the activity

Question	Rating				
	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
The activity was interesting & a useful experience.	69%	31%	-	-	-
The activity encouraged me to participate in group discussion and presentation sessions.	73%	24%	3%	-	-
The activity provided an effective environment for sharing of information, experiences, and ideas with peers.	88%	12%	-	-	-
Co-relating course contents with the multiple stages of activity compelled me to get help from the instructor or peers.	100%	-	-	-	-
I was reluctant to get help of instructor or peers during the activity			-	12	88
I was reluctant to ask questions if find difficulties regarding activity				19	81
I gave my 100% input in group assignments	51%	34%	-	11%	07

Table 2
Participants' responses characterizing their attitude towards soft skills development

Question	Rating				
	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
ABL promoted my confidence (Assertiveness).	70%	27%	3%		
ABL promoted my interpersonal communication skill	60%	33%	4%	3%	-
ABL promoted my emotional management skill (including emotional expression and emotional assessment of oneself and of others).	30%	63%	5%	1%	1%
ABL helped me to strengthen my self-control skill.	47%	50%	-	3%	-
ABL helped me to promote my self-esteem	32%	51%	6%	10%	1%
ABL is an effective approach for promoting self-motivation.	67%	32%	-	1%	-
ABL helped me to strengthen my social relations management skill.	77%	23%	-	-	-
ABL promoted my stress management skill	23%	57%	15%	5%	-
ABL encourage me to maintain empathy	30%	63%	5%	1%	1%
ABL approach made me more happy and optimistic person	30%	63%	5%	1%	1%
ABL helped me to strengthen my time keeping skill	47%	50%	-	3%	-
ABL promoted my organization/planning	57%	40%	2%	1%	-
ABL strengthen my helping others skill	77%	23%	-	-	-
ABL approach made me more adaptable and flexible.	77%	23%	-	-	-
ABL promoted my thinking and problem solving skill	47%	42%	3%	7%	1%
ABL promoted my constructive investigation skill	37%	52%	11%	-	-
ABL promoted my knowledge sharing skill	70%	30%	-	-	-
ABL promoted my information management	70%	30%	-	-	-
ABL promoted my team working & leadership skill	47%	50	3%	-	-

The study found that the real-life activity was an interesting experience for the participants. The data shown in Table 1 and Table 2 show that, in several ways, ABL appeared to be very useful for enhancing participants' soft skills. In addition, the researcher found:

- The participants become more responsible, disciplined, and serious towards their studies.
- The participants developed new learning habits, including analytical reading, creative thinking, discriminating and filtering information of importance.
- The participants showed keen interest in activity participation, collaborative learning, cooperative learning, and knowledge sharing in a friendly atmosphere.
- The participants improved their discipline, social behavior, interpersonal communication, and other soft skills.
- The participants demonstrated the best academic integrity and ethical & moral values.

4. DISCUSSION

The study found that the proposed student center activity based learning model for strengthening soft skills produced very encouraging results which is evident from the participants' responses shown in the Table 1 and Table 2. It is also evident from participants' feedback: "Learning comes to me a very different thing now. Associating real life experiences with course contents developed my concepts so strong that I'll not forget it rest of my life". Another participant comments, "I was against the idea of group study with boy. But the experiences of this activity have changed my thoughts. It has boosted my confidence, communication, and presentation skills. Now, I have the confidence to work with male fellows". Another participant comments, "I hate presentation assignments; just cut-and-past material from the Internet and present to the Class. But, preparing presentations for this class were challenging and full of learning. I love this teaching style". Another participant comments: "This course has not only teach me concepts related to curriculum development but also improved my soft skills."

The real-life based field activity "Cultivating, Planting, Growing and Harvesting Potato Crop" was a unique experience for the participants. It offers various opportunities for experiencing, memorizing, understanding, and socializing. At the same time, it created an environment which promotes participants' intellectual, social, physical, and sensory learning. Participants got a lot of opportunities to improve their soft skills included in the inventory adopted from Aworanti, Taiwo & Iluobe (2016), like self-esteem, self-motivation, stress management, time management,

organization/planning, thinking & problem solving, constructive investigation, and information management. Working in groups also promoted their confidence, interpersonal communication, knowledge sharing, teamwork & leadership skills. They learn working collaboratively while respecting others' attitude, behaviour, and belief. It improves their skills like social relations management, self-control, empathy, emotion management, helping others

During the activity, the participants showed high work standards and moral & ethical values, and respect socio-cultural factors while having a sense of responsibility. They showed very caring attitude towards each other. Except some occasions, the participants demonstrated patience, tolerance, and accommodative attitude towards each other. They perform the activity with full zeal and interest. Activities like keeping pictorial data of their plant's growth, counting plants leaves, measuring its size, etc. demonstrate their level of involvement & interest. Their sense of belonging made them very touchy. For example, one night some cats entered into the field, as a result three plants damaged and two plants lost some leaves. The next day, the whole class showed a very sympathetic attitude towards the participants whose plants were affected and they were very gloomy. The whole class indulged in a serious investigation to find out the actual facts. This incidence made the class more caring, sociable, and friendly. Similarly, the whole class showed very touchy behavior when some laborers damaged some plants while unloading bricks for construction. The participants co-related such incidence with "the impact of internal & external factors on curriculum development".

Managing discipline remained a challenge for the researcher during the outdoor activities. Keeping students motivated was another challenging area. Sometimes, stereo-type teachers and students pass negative and harsh comments like, "you are growing curriculum; I've never seen doing this silly thing anywhere before". Such comments sometimes made students disappointed. One participant commented in her logbook, "Times I become very depressed when other teachers and students make jokes on us. But, the harvesting day took away all my sorrows; it was a unique experience for all of us. Every face was happy as we were going to see the result of our hardwork which we had put into making this activity fruitful. We had a potato party and invited all the faculty members & students of the Division. We sold "Aloo Chana Chat" for Rs. 25/=per plate and

presented French Fries to the Vice Chancellor. We felt so proud when he appreciated our initiative. I am sure none of us will forget this day.” Another participant comments: “It is much better to aim at something high and do our best to achieve it. But, it depends on the way our teachers collaborate with us. I wish teachers spend time researching new ideas and learning key concepts rather discouraging those who are implementing innovative ideas.”

5. CONCLUSION & RECOMMENDATION

The research shows that the proposed model offers various opportunities to strengthen the participants’ soft skills through experiencing, memorizing, understanding, and socializing. At the same time, the real-life activity improves the participants’ active participation. The model provided an environment which helps the participants to promote their sense of ownership of their intellectual and social learning. Their fieldwork experiences along with classroom activities proved to be very effective to strengthen their soft and hard skills. It also promoted their sense of moral, ethical and shared responsibilities. The study strongly recommends that teacher education institutions in Pakistan must reconsider teaching-learning methodologies and make room for activity based learning.

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COMPARISON OF METHODS BEING USED FOR TEACHING MATHEMATICS AT O LEVEL AND SECONDARY SCHOOL CERTIFICATE SYSTEMS

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ABSTRACT

The aim of this study was to compare the methods being used for teaching mathematics at General Certificate of Education O Level and Secondary School Certificate Systems. A questionnaire was used to find out opinions of students and teachers of both the systems about the method being used in their mathematics classroom. For data collection, three research instruments were used: a questionnaire comprised of twenty statements about the method of teaching is used by their mathematics teachers; an observation checklist contained thirty-four items whereas interview schedule consisted of ten questions and twelve probes. After piloting research instruments, to establish the validity and reliability of these tools. The questionnaires got filled by teachers and their students. One of the researchers, Mrs. Haleema Bano was the interviewer and observer. The teachers were interviewed and their mathematics classes were observed to triangulate the data obtained through questionnaires. Data analysis involved Mann-Whitney U-test, t-test and thematic analysis. Results showed that teachers of the O level system are more efficient at using problem-solving as a teaching strategy in their mathematics classroom than teachers of SSC system. It was recommended to provide training to the SSC school teachers for using problem-solving teaching strategy in teaching mathematics.

Key Words: Problem Solving, Teaching Mathematics, GCE O Level system, SSC system

1. INTRODUCTION

Mathematics enjoys a pivotal position among the school core subjects. The significance of mathematics is well established across the world. This discipline is known for its role in sharpening human minds, developing reasoning power and logical thinking. In spite of these facts, this subject suffers from ineffective instruction. Low achievement scores are generally associated with this subject. It is seen as a difficult and boring subject on the part of learners while teachers find it challenging to motivate their learners for its learning.

Mathematics is taught as a compulsory subject from grade one to ten in Pakistan (Govt. of Pakistan, 2009). As the students enter the secondary school stage they are required to make the choice for optional groups such as science, humanities, computer science, etc. Selection of any optional group at this stage affects the opportunities for future career selection. Owing to its importance mathematics is taught as a compulsory subject for all students at the secondary level (Govt. of Pakistan, 1979). The secondary and higher secondary stage of schooling has dual significance. It provides skills to the labor market as many students leave formal schooling at this stage while on the other hand it has to provide inputs for higher education (Govt. of Pakistan, 2009). Compulsory status of mathematics at this crucial stage of schooling indicates the potential of this subject for training pupils mind for logical thinking critical analysis and personal decision making.

At the secondary level, all the public schools administer the Secondary School Certificate (SSC) examination and award the certificate to successful candidates. Whereas O Level sector higher-quality elite schools offer the International General Certificate of Education (IGCE) O level equivalent to SSC. Ashfaq (2008) points out the increasing acceptability of O level due to its worldwide acknowledgement. There is a need to compare indigenous parallel certificate (SSC) to find out the difference in teaching methods, especially mathematics.

Sidduh (2008), while recognizing the immense importance and magnificent contribution of the discipline, states that right from the discovery of an atom in outer space travelling, mathematics is the force and path leading to this marvelous advancement in science and technology. Al-Qaisi (2010) states that many studies have clearly shown

low achievements in mathematics all over the world. This alarming and continued poor performance in this vital subject has led many researchers to find out reasons both in school and otherwise. The teacher never bothers to help the student learn higher order thinking skills and making use of learnt content in real life circumstances (Beard & Wilson, 2005). It is suggested to use investigation as a teaching strategy in the mathematics classroom (National Council of Teachers of Mathematics, 1999). Students who learn through activity and engagement can better examine, discover relationships and find solutions to problems and provide evidence (Robertson, 2005). Problem-based learning equips the learner with the ability to find a proper, suitable solution of a problem she/he faces (Hmelo-silver, 2004). In a problem-based learning session, a deliberate, organized, and meaningful struggling is done so that a conclusion, a way out may be found in an issue, a problem of educational worth and value (Achike & Nain, 2005). There is a growing trend to adopt this technique for teaching purposes (Savin-Baden & Wilkie, 2004). Ashfaq (2008) points out that in SSC system students are required to memorize and reproduce knowledge at their best while at O level, opportunities are provided for promoting critical thinking, creativity and conceptual clarity. If GCE system is taken in terms of teaching mathematics, one witness a wider range of knowledge, conceptual learning, critical thinking and durable comprehension of this subject. Obviously, teaching methodology is playing its role in this achievement. It is desirable at this stage to learn more about this element and to compare the same with that of an SSC system to diagnose the shortcomings and loopholes of SSC system, a system rendering its services to the masses of this nation. Saeed (2007) emphasizes the role of comparative studies in the field of education. It is significant for keeping oneself aware of the changes and advances taking place all over the world.

Secondary school education in Pakistan is offered by two different systems, the SSC and O level. SSC system is offered by public sector and followed by masses of this country, whereas O level system is an expensive certification and is afforded only by elites of this country. It is offered by fewer elite class O level institutions. GCE is generally considered as a superior qualification than SSC. The research is needed to find out whether methods of teaching recommended in the curriculum document of both systems, (inquiry and problem solving methods) are being used or not by the respective teachers.

2. METHODOLOGY

The researchers used mix research method. The research on the notion that collecting different types of data best makes an understanding of a research problem. By using quantitative and qualitative, the researcher can triangulate the investigation.

2.1 Population and Sample

It was intended to include 50% O level schools of Islamabad as the study sample, however, only ten institutions gave access for data collection. These ten institutes were selected as a convenient sample of the study. There were 250 students enrolled at GCE O level in these ten O level schools. To equate this sample from O level sector researcher randomly selected ten SSC schools and took 25 students randomly from each school as part of the study sample. Thus, five hundred students in total were the respondents of the research. Of these sample schools twenty mathematics teachers, ten from SSC schools and ten from O level schools (one mathematics teacher from each school) participated in the study.

2.2 Research Instruments

A questionnaire was designed and used for data collection from students and teachers about the instructional method used by the teachers for teaching mathematics. An interview schedule and classroom observation rating scale were developed to obtain data about teachers' opinion and practice regarding the method of teaching they were using in their classrooms. The reliability (for both questionnaire and classroom observation rating scale) was established using Cronbach's Alpha statistical test. The value of Cronbach's Alpha for questionnaire (30 items) was 0.824 and for classroom observation rating scale (28 items) was 0.718.

2.3 Data Collection

Researcher personally visited all the sample schools. Heads of institutions were requested to facilitate researcher for data collection process. Researcher, with the permission of the administration, met mathematics teachers and briefed them about the objectives of the study. Teachers were then requested to fill in the questionnaire and get the questionnaire filled by their students. Researcher got permission from mathematics teachers for taking an observation in their classrooms during instruction. Teachers were requested to spare some time for the interview, which they managed

to spare at the end of the day. Researcher personally interviewed all the teachers who were respondents of the study. School administrations, their mathematics teachers, and concerned students thoroughly cooperated in the entire process of data collection. The researcher observed all the research ethics during and after the data collection process.

3. FINDINGS

3.1 Based on Questionnaires

Table 1
Comparison of the opinions of SSC and O level teachers about use of traditional teaching method

Teacher	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	p
SSC	10	10.50	136.50	45.500	-0.87	0.384
O level	10	12.94	116.50			

The table 1 shows that mean rank of SSC teachers (10.50) is less than O level teachers (12.94) about the use of traditional teaching method but Mann-Whitney U test shows that calculated value of z (-0.87) is not significant as $p > 0.05$. Therefore, it can be concluded that there is no significant difference between the opinions of SSC and O level teachers about the use of traditional teaching method although O level teachers are more inclined to use the traditional method.

Table 2
Comparison of the opinions of SSC and O level teachers about use of problem solving teaching method

Teacher	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	p
SSC	13	11.00	143.00	52.000	-0.436	0.663
O level	9	12.22	110.00			

The table 2 shows that mean rank of SSC teachers (11.00) is less than O level teachers (12.22) about the use of problem solving method but Mann-Whitney U test shows that calculated value of z (-0.436) is not significant as $p > 0.05$. It is evident that there is no significant difference in the opinion of SSC and O level teachers about the use of problem solving

teaching method although O level teachers possess more understanding of the problem solving method.

Table 3
Comparison of the opinions of SSC student and teachers about use of traditional teaching method

Category	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	p
Student	246	127.53	31373.00	992.000	-2.309	0.021
Teacher	10	176.69	2297.00			

The table 3 shows that mean rank of SSC students (127.53) is less than SSC teachers (176.69) about the use of traditional teaching method and Mann-Whitney U test shows that calculated value of z (-2.309) is not significant as $p > 0.05$. So, it can be concluded that there is a difference between the opinions of SSC students and teachers about the use of traditional method where SSC teachers show a strong tendency for using the traditional method.

Table 4
Comparison of the opinions of SSC student and teachers about use of problem solving teaching method

Category	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	sig
Student	246	127.44	31350.00	969.000	-2.396	0.017
Teacher	10	178.46	2320.00			

The table 4 shows that the difference is observed between the average ranks of the opinion scores of SSC student (127.44) and SSC teachers (178.46) about the use of problem solving teaching method. The results of Mann-Whitney U test show that there is a statistically significant difference between the opinions of SSC students and teachers about the use of problem solving teaching method by SSC teachers ($z = -2.396$ and $p = 0.017 < 0.05$). Therefore, it can be concluded that the students are not agreed with teachers for use of the problem solving method in their teaching.

Table 5
Comparison of the opinions of O level students and teachers about use of traditional teaching method

Category	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	P
Student	254	130.42	33126.00	741.0	-1.797	0.072
Teacher	10	176.67	1590.00			

The table 5 shows that mean rank of O level students (130.42) is less than O level teachers (176.67) about the use of traditional teaching method but Mann-Whitney U test shows that calculated value of z (-1.797) is not significant as $p > 0.05$. Therefore, it is evident that there is no difference between the opinions of O level students and teachers about the use of traditional teaching method although O level teachers show more inclination for using the traditional teaching method.

Table 6
Comparison of the opinions of O level students and teachers about use of problem solving teaching method

Category	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	p
Student	254	130.47	33140.00	755.000	-1.732	0.083
Teacher	10	175.11	1576.00			

The table 6 shows that mean rank of O level students (130.47) is less than O level teachers (175.11) about the use of problem solving teaching method but Mann-Whitney U test shows that calculated value of z (-1.732) is not significant as $p > 0.05$. Therefore, it can be concluded that there is no difference between the opinions of O level students and teachers about the use of problem solving teaching method although teachers are more inclined towards using the problem solving method.

Table 7
Comparison of the opinions of SSC and O level students about the use of traditional teaching method

The table 7 shows that mean rank of SSC students (210.94) is less than O level student (288.81) about the use of traditional teaching method and Mann-Whitney U test shows that calculated value of z (-6.036) is

Teacher	N	Mean	SD	S E Mean	t	sig
SSC	6	1.33	0.82	0.33	-3.60	0.007
O level	4	10.50	6.35	3.18		

significant as $p < 0.05$. Therefore, it can be concluded that there is significant difference between the opinions of SSC students and O level students about the use of traditional teaching method where O level students are identifying that their teachers use traditional teaching method.

Table 8
Comparison of the opinions of SSC and O level students about the use of problem solving teaching method

Sector	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	p
SSC	246	210.94	51891.50	21510	-6.036	0.000
O level	254	288.81	73358.50			

The table 8 shows that mean rank of SSC students (237.57) is less than O level students (263.02) about the use of problem solving teaching method and Mann-Whitney U test shows that calculated value of z (-1.971) is significant at 0.05 level. So, it can be concluded that there is significant difference between the opinions of SSC and O level students about the use of problem solving teaching method where O level students identify problem solving as a teaching method used by their teachers.

3.2 Based on Observation

Table 9
**Comparison of the SSC and O level teachers in using problem solving
teaching method in their class**

Sector	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	p
SSC	246	237.57	58442.50	28000	-1.971	0.049
O level	254	263.02	66807.50			

The table 9 shows that mean rank of SSC teachers (1.333) is less than O level teachers (10.50) about the use of problem-solving teaching method in their class and t-test shows that calculated value of t (-3.602) is significant at 0.05 level. Therefore, it can be concluded that there is a significant difference between the SSC and O level teachers in using problem-solving teaching method in their class with O level teachers more frequently using problem-solving.

Table 10
**Comparison of the SSC and O level teachers in using traditional
teaching method in their class**

Teacher	N	Mean	SD	S E Mean	t	sig
SSC	6	15.3	1.21	0.494	3.558	0.007
O level	4	7.0	5.75	2.858		

The table 10 shows that the mean rank of SSC teachers (15.3) is greater than O level teachers (7.0) about the use of traditional methods in their class, but t-test shows that calculated value of t (3.558) is significant at 0.05 level. Therefore, it is evident that there is a significant difference between the SSC and O level teachers in using traditional methods in their classes where SSC teachers clearly demonstrated the use of the traditional method.

3.3 Based on Interview Schedule

Theme1: Warm-up Activities

Categories: Announcement of the topic (verbal or written), Posing questions, Activating higher order thinking

O level school teachers (71%) start their class by posing questions while 29% start their work by announcing the topic. SSC teachers (75%) start their work by announcing the topic verbally or writing it down on the writing board where as 25% asks questions to start their work. It is evident that O level school teachers are more aware of the importance of questioning as starting point for learning as compared to SSC teachers.

O level school teachers (57%) try to generate higher order thinking through questioning while 43% asks questions to check their previous knowledge. SSC teachers (92%) do not intend to create doubts through the questions so that higher order thinking may be generated. Only 8% SSC teachers do so. It is evident that O level school teachers try to generate higher order thinking as compared to SSC sector teachers.

Theme2: Problem Solving Method

Categories: Encouraging questioning, democratic atmosphere, ongoing assessment, conceptual learning

O level school teachers (71%) encourage guessing while 29% are of the view that guessing can be encouraged only to some extent. SSC teachers (67%) encourage guessing, 25% do not do so while 8% do so only to some extent. There is a slight difference in the percentage of O Level and SSC teachers who encourage guessing.

O level school teachers (57%) consider class discipline as an important element of effective learning. 43% think that interaction and discussion is more important than discipline. SSC teachers (100%) agree that disciplined classroom is more important for effective learning. It can be clearly seen that a greater percentage of O level school teachers consider interaction and discussion more important for learning as compared to class discipline.

O level school teachers (86%) agree that students can be successfully assessed during the learning process while 14% teachers feel doubt that for big classes it is not possible. SSC teachers (66%) agree that students can be successfully assessed during the learning process while 17% do not agree with this idea and think that it is possible with small class only. A relatively higher percentage of O level school teachers believe that students can be assessed successfully during the learning process.

O level teachers (43%) talk most of the time during class with the purpose of explaining and communicating effectively, whereas 57% of them share this time with their students with the purpose of involving them in discussion. SSC teachers (66%) are dominant speakers in the class while the 34% share this time with their students for discussion. It is evident that a greater percentage of SSC teachers are dominant speakers in their class as compared to O level school teachers.

O level school teachers (57%) believe that students can learn independently, whereas 43% of them doubt they can learn except very occasionally. SSC teachers (16%) are confident that students can learn independently through questioning while 84% are not sure that students can learn independently. A greater percentage of O level school teachers believe in the ability of students to learn independently as compared to SSC teachers.

Teachers of both O level and SSC (100%) are sure that their students feel free and comfortable in asking questions from their teacher.

Theme3: Traditional Method. Categories: Focus on accuracy, authoritative attitude, focus on content

O level school teachers (71%) don't want their students to be very accurate in their response to the question asked by teacher while 29% emphasize accuracy in response of the students. SSC teachers (67%) do not emphasize accurate response to the question asked, but 33% require them to be accurate in their response. There is a slight difference in the percentage of teachers of public and O levels who emphasize accuracy in responses of the students.

O level school teachers (28%) do not initiate in extending help rather give their students an opportunity to make an effort in their own first and 72 %

extend help and guidance before assigning them work. SSC teachers (20%) do not extend help till they are asked for, 80%, however not wait for student request for help and guidance. There is a slight difference in the percentage of public and O level school teachers who initiate in extending help to their students.

O level school teachers (57%) consider it necessary to provide knowledge before asking their students to work independently 43% however does not consider it necessary all the time. SSC teachers (100%) consider it very important to provide knowledge before expecting they work independently. It is evident that a greater percentage of SSC teachers consider it important to provide knowledge before expecting they work independently.

O level teachers (71%) believe that students can learn independently and discover new knowledge while 29% are not sure those students are capable of independent learning. SSC teachers (33%) believe that students can learn independently while 43% think it is possible only to a limited extent. For 25%, however it is unrealistic to expect that students can learn independently. It can be seen clearly that a greater percentage of O level school teachers are confident that students can learn independently as compared to SSC teachers.

4. DISCUSSION

The teachers of the O level system were found more efficient in making use of problem solving strategy for teaching mathematics as it is emphasized by NCTM (1989) that problem-solving should be the central focus of the curriculum. Similar findings can be witnessed with Ashfaq (2008) where it is asserted that in the level system, opportunities are provided for promoting critical thinking, creativity and conceptual clarity (outcomes of problem solving).

Teachers of the SSC system were found frequently using traditional methods for teaching mathematics against the suggested methods in curriculum which are discovery and inquiry methods. In a traditional mathematics classroom, there is no possibility of teachers motivating and supporting students for making them discover their own knowledge (Hiebert, et al, 2003). Raza (2002) pointed out similar conditions in

mathematics classrooms in Pakistani schools where the teacher is the authority that cannot be challenged or questioned. The focus of learning is not the concept, but an exposition of the teacher. Quite submission and rote learning are the ultimate product of such education.

5. CONCLUSIONS

5.1 Conclusions based on questionnaires

- Teachers of both the systems are using traditional teaching method and problem solving teaching method with the same frequency.
- There is disagreement between students and teachers of the SSC system about the frequency of use of traditional teaching method and problem solving teaching method in their classroom. Students have mentioned high frequency of use of traditional methods by their teachers.
- There is an agreement between students and teachers of the O level system in the frequency of use of traditional and problem solving method in their classroom.
- There is a disagreement between students of the O level system and SSC system in the frequency of use of traditional and problem solving method in their classroom.

5.2 Conclusions based on observation rating scale

- O level teachers are using problem solving method for teaching mathematics, more efficiently than SSC system teachers.
- SSC system teachers are dominantly using traditional methods for teaching mathematics in their classes.

5.3 Conclusions based on teachers' interviews

- It is evident that O level teachers are more aware of the importance of questioning as starting point for learning as compared to SSC system teachers. It is evident that more O level sector teachers try to generate higher order thinking as compared to SSC teachers.
- There is a slight difference in the percentage of O level and SSC system teachers who encourage guessing.
- It can be clearly seen that a greater percentage of O Level teachers consider interaction and discussion more important for learning as compared to class discipline.

- A relatively high percentage of O level as compared to SSC teachers believe that students can be assessed successfully during the learning process.
- It is evident that a greater percentage of SSC system teachers are dominant speakers in their class as compared O level teachers.
- A greater percentage of O level teachers believe in the ability of students to learn independently as compared to SSC system teachers.
- There is a slight difference in the percentage of teachers of SSC system and O level who emphasize accuracy in responses of the students.
- There is a slight difference in the percentage of SSC system and O level teachers who initiate in extending help to their students.
- It is evident that a greater percentage of SSC system teachers consider it important to provide knowledge before expecting they work independently.
- It can be seen clearly that a greater percentage of O level teachers are confident that students can learn independently as compared to SSC system teachers.
- It is evident that a greater percentage of O level teachers consider the main objective of teaching mathematics is developing logical thinking and reasoning power, whereas, a greater percentage of SSC system teachers attach maximum importance to the objective of preparing learners for different careers.

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ARE WE READY TO INTEGRATE TECHNOLOGY IN TEACHING? A STUDY OF PROSPECTIVE TEACHERS' PERCEPTIONS AND PREFERENCES

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ABSTRACT

The focus of the study was to examine the perceptions and preferences of the prospective secondary school teachers of Pakistan, towards use of information and communication technologies in classrooms. An attempt in this regard was made to identify the factors that influence teachers' decisions for adoption and use of information technology for teaching-learning process. These factors ranged from perceived usefulness of technology for learning to the availability of IT equipments. Students of Masters in Education program of Allama Iqbal Open University were taken as the population for the study. Out of 35515 enrolled students in semester Spring 2011, 250 students (prospective teachers) were selected by using simple random sampling technique. A questionnaire consisting of 29 items was used to collect data. Descriptive statistics and regression analysis was used to analyze the data. The study revealed very interesting findings as majority of the prospective teachers did not feel themselves as ready to adopt IT for their teaching learning process. The study concluded that the prospective teachers' perceived user friendliness and self-efficacy did not have a significant relationship with preference to use IT in the classroom. On the other hand the perceived usefulness and availability of equipment were identified as the major determinants of prospective teachers' inclination to use IT in the classroom.

Key words: Beliefs; Conducive Environment; Information Technology; Self-efficacy; User Friendliness

1. INTRODUCTION

Integration of technology in education throughout the world has occupied a central position in every educational reform as Byers, Ogle and Tech (2000) over a decade ago warned that IT proficiency both at individual and national levels has become axiomatic for survival and advancement in 21st century.

Prensky (2001) as cited in Munday, Kupczynski and Kee (2012) was the first who coined the term “digital natives” to refer to the younger generations, typically born in late nineties. These generations grew up surrounded by technology interwoven into their everyday lifestyles. According to Prensky (2001) use of technology in the classrooms, has therefore, become inevitable in the present time. Ismail, Almekhlafi and Al-Mekhalffy (2010) concluded through meta- analysis of the studies related to the use of technology in educational setting that most of the studies shared a communal finding that relates to the effectiveness and usefulness of integration of technology in teaching learning process. The studies proved that use of technology significantly assists in developing and applying modern and effective teaching methods and helps in broadening students’ knowledge (Frigaard, 2002; Schofield & Davidson, 2003; Miner, 2004; Timucin, 2006 cited in Ismail et al 2010). Integration of technology into education is indispensable to produce human resources that are not only educated but also skilled and competent in using new technologies and thus be able to face global challenges (Miner, 2004; Almekhlafi, 2006; Lavin & Wadmany, 2006)

As a matter of fact integration of technology in teaching learning process is as not as simple phenomenon as it may seem to be. Many complex factors are involved in this process among them one of the most critical is the readiness of the teachers to use technology in the class rooms. In fact any reform in education system remains outside the boundary of the classrooms unless teachers are not prepared and willing to adopt it as *‘teachers are seen to be active agents in the process of changes and implementation of new ideas as their beliefs and attitudes may support or impede the success of any educational reform’* (Woodrow, 1991 cited in Ismail et al 2010). Providing thoughtful insight into the issue of teachers’ preparedness for using Information Technologies in teaching and learning process, Granger, Morbey, Owston & Wideman (2002) cited in Gill and Dalgarno (2008) elucidated that the *“relationship between teachers’ level*

of ICT skills and the successful implementation of these skills in classrooms is complex.” They concluded that there is a wide range of contributing factors in this regard including but not limited to teachers' attitude, beliefs and philosophies as well as access to training opportunities, in addition to the provision of necessary equipment, required support, and technology education. Their study results were further confirmed by the arguments of Baskin and Williams (2006) cited in Gill and Dalgarno (2008) who postulated that human factors are the most critical ones in nurturing the technology culture in the schools and enabling the mass of teachers to use the IT effectively in their teaching process. Hennessy, Harrison and Walmakote (2010) argued that teacher-related factors are undoubtedly the most crucial factors influencing the use of technology in the classrooms. They considered IT literacy and confidence among teachers as the most predominating teacher-related factors.

Similarly, Tella, Toyobo, Adika & Adeyinka (2007) found that most of the teachers who preferred to use IT in classrooms were those who perceived IT as very useful tool for making teaching and learning easier. In this context other studies also confer that teachers who use technology in the classrooms believe in its usefulness for enhancing recall of previous learning; for provision of new stimuli; for activation of the learner's response as well as for providing immediate and systematic feedback (Hennessy et al 2010; Jones, 2008; Apay, Celik, Aypay and Sever, 2012).

On the other side, there may be an understandable apprehension, even fear, by many teachers in an IT-equipped classrooms (Futurelab, 2003). Two major factors hindering teachers to use ICTs in classrooms are having no experience of technology as learners and the constant changing nature of technology (Jones, 2008). Besides these issues, there is a range of physical and cultural issues including shortage of electricity, limited access, insufficient infrastructure, language of instruction and available software, lack of political will and limited opportunities for professional development of teachers (Hennessy et al 2010). But Hennessy et al (2010) argued that widespread access, infrastructure and professional trainings would not guarantee use of technology in the classroom, rather psychological factors related to the beliefs and attitude of teachers are much more critical. Baek, Jung and Kim(2008) referred to the findings of

Net Day Survey (2001) that sophisticated and supportive school leadership is needed for teachers to make them use technology in the classrooms.

Moreover, Technology Acceptance Model -a remarkably useful theoretical tool for understanding how the level of teachers' technology acceptance determines technology integration (Apay et al 2012) was initially proposed by Davis, Bagozzi & Warshaw (1989). This model proposes that three main factors predict use of technology; Perceived Usefulness, Perceived Ease of Use, and Intention to Use (Milleri, Rainer & Corley, 2003; Cox, Preston and Cox, 2002). Another factor included in the model is facilitating conditions. Perceived usefulness in case of teachers refers to a belief that this will facilitate teaching and help in having more control over knowledge transaction (Wong, Osman, Goh and rahmat, 2013; Rasan et al, 2011 cited in Aypay et al 2012). Perceived ease of use refers to self-efficacy of teachers to use technology. Facilitating conditions include availability of equipments well as support to use it. Studies showed that facilitating conditions are one of the most critical factors influencing the intention of teachers to use technology in classroom (Lu, Chun-Sheng, & Chang, 2005 cited in Aypay 2012).

In view of the above the present study aimed to explore the perceptions and preferences of prospective teachers regarding integration of technology in classroom teaching. An attempt was also made to highlight the factors drawn through the review of related literature, particularly from Technology Acceptance Model, that might be responsible for the certain intentions and decisions of prospective teachers. For present study technology usage was delimited to use of computers in the classrooms.

The study intended to answer a few research questions:

- I. What are the intentions of prospective teachers towards use of ICT in classroom teaching?
- II. Is there any relationship between the prospective teachers' preference to use ICT in the classrooms and the perceived usefulness of technology?
- III. Whether some relationship exists between perceived user friendliness of the technology by prospective teachers and their preferences to use ICT in teaching?

- IV. Does a relationship exist between level of computer self- efficacy of prospective teachers and their intentions to use ICT?
- V. What is the perception of prospective teachers about role of supportive environment in the school in use of ICT in classroom teaching?

2. METHODS

The study was descriptive in nature and quantitative research design was used to study the phenomenon under consideration. Students of Masters in Education Program specialization in Teacher Education, enrolled in Semester Spring 2011 in Allama Iqbal Open University, Islamabad constituted the population of the study. Target population was 35515 prospective teachers/ students. Among the accessible population 250 students/ Prospective Teachers were selected by using simple random sampling technique. Out of 250, 229 prospective teachers responded resulting in 91.6% response rate.

A questionnaire consisting of 29 items was used to collect data. Questionnaire consisted of six major variables including Technology Usefulness; Perceived user Friendliness; Computer Self efficacy; Availability of Equipment; Conducive Environment and Intention to use Computer in classroom. Intentions to use computer was taken as dependent variable and remaining variables served as independent variables for this study. Details of the items for each variable are as following:

Table 1
Details of corresponding items of Factors affecting teachers' preference to use IT

Factors	No of Items
Technology Usefulness	7
Perceived User Friendliness	5
Computer Self- Efficacy	4
Availability of Equipment	6
Conducive Environment	4
Intention to use Computers in Classroom	3

These items were constructed on five point Likert scale. Before collection of data, instrument was validated through expert consultation for this purpose, 3 experts of educational technology from Allama Iqbal Open University were consulted and according to their feedback some amendments in the questionnaire were made. Questionnaire was pilot tested upon 25 students of M.Ed programs who did not form the sample of the study. Alpha Coefficients were calculated to ensure reliability and alpha coefficient were found to be ranging from .73 to .89.

Moreover semi structured interviews of the volunteer respondents were also conducted to get further insight into the issue. 38 prospective teachers were interviewed for about 20 minutes for each respondent. During interview their intentions to use computer for teaching and the possible determinants of these intentions were explored.

3. FINDINGS

For analysis of data, both descriptive and inferential statistics were applied. Moreover, interpretations of the interviews were made to draw the conclusions.

Table 2
Descriptive Statistics of Potential Factors affecting Teachers’
Intention to Use Technology in the Classrooms

Factor		Mean	Std. Deviation
Perceived Usefulness		3.53	.526
User Friendliness		3.47	.702
Computer Self-Efficacy		3.87	.722
Equipment Availability		3.38	.583
Supportive Environment		3.07	.567

N=229

Table above depicts self-efficacy had the highest mean value that is 3.87, whereas supportive environment had the lowest mean value that is 3.07. Standard deviation of responses for all factors ranges from .526 to .722.

Table 3
Descriptive Statistics of Intentions of Prospective Teachers to integrate Technology in the Classroom Teaching

Item	Mean	Std. Deviation	
Item1	2.06	.565	
Item2	1.35	.512	
Item3	1.76	.503	

N=229

It is noticeable from the table that Item no 1 that was ‘ I would like to use computer to plan my lesson’ had the highest mean value that is 2.06. Standard deviation of the items ranged from .50 to .56. Whereas item no 2 that was ‘I would like my students to use computer to do activities during the class’ had lowest mean value. Data analysis revealed that prospective teachers’ intention for using computers in the classrooms was not high as depicted by mean score.

Table 4
Regression Analysis

Modal Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.520 ^a	.303	.261	.32166

Adjusted R Square value .261 shows that about 26% of the variance in the dependent variable (teachers’ intentions) can be predicted from Independent variables.

Co-efficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.909	.177		10.745	.000
	Perceived Usefulness	.100	.045	.138	2.302	.022
2	User Friendliness	.056	.038	.119	1.240	.239
3	Computer Self-Efficacy	.059	.046	.112	1.279	.202
4	Equipment Availability	.262	.046	.401	5.709	.000
5	Supportive Environment	.141	.043	.209	3.303	.001

a. Dependent Variable: Intention to Use Technology in Classrooms

The specified regression equation for the present study takes the following form:

$$Intention + \beta_1(PU) + \beta_2(UF) + \beta_3(SE) + \beta_4(EA) + \beta_5(Su En)$$

Where:

Perceived Usefulness = PU

Equipment Availability = EA

User Friendliness = UF

Supportive Environment = SuEn

Self-efficacy = SE

So inferred equation was as:

$$Intention \text{ for Technology Integration} = 1.909 + .100 (PU) + .056 (UF) + .059 (SE) + .262 (EA) + .141(SuEn)$$

The levels of significance of the potential influencing factors that were Perceived Usefulness, Equipment Availability and Supportive Environment were found to be as .022,.000 &.001 respectively. Whereas, two factors namely User friendliness and Self-efficacy were not found to

be the significant predictors of prospective teachers' preference to use technology.

4. DISCUSSIONS

The results of this study revealed that prospective teachers did not have high intentions to use computer during their future classroom teaching. The same was further confirmed through semi structured interview when majority of the respondents showed their intention to use computer only up to minimum extent during their classroom teaching. One prospective teacher/ respondent said:

I don't think it is a good idea to weaken student teacher relation the classroom by making students interacting more with the computer and less with the teacher.

Low preference for the use of computers in the classrooms was mainly due to three factors. Firstly perception of the teachers regarding usefulness of technology for teaching and learning was not considerably positive; secondly most of the teachers did not think that the sufficient equipment related to support of computer usage is available in public schools of Pakistan. Thirdly prospective teachers were not hopeful to have a supportive and conducive environment in the schools. Interviews of the prospective teachers further confirmed these views. Some prospective teachers were of the view that computer integration would face a lot of resentment in the schools as most of the senior teachers and principals belong to generation X and this generation has a lot of anxiety, fear and hatred of information technology including computers. In this scenario it does not make any sense to hope for the supportive environment. One respondent shared his views as:

If as a newly inducted teacher I would try to integrate technology I would be considered as being over efficient and my head as well as senior colleagues may become offended that I am trying to change the teaching learning culture in school.

An interesting and unexpected result was related to the views of prospective teachers regarding user friendliness of technology and self-

efficacy of the prospective teachers. Majority of the respondents did consider information technology as highly user friendly and they were of the view that use of information technology did not possess any challenge for them. Most of them were particularly using information technology for their personal purposes for example social contacts. Level of self- efficacy was found to be quite high among majority of the respondents. During interviews some were confident enough to troubleshoot information technology. In this regard the study results partially supported the study of Apay et al (2010) and the study by Timothy (2009). Both these studies used Technology Acceptance Model thus it can be inferred here that the study also partially confirmed TAM in Pakistani context. Perceived usefulness, equipment availability and supportive environment all had a significant impact on behavioral intention to use technology in the classroom. However, for self-efficacy and user friendliness it is well-established in the literature that when a person know well how to use technology and/or becomes comfortable with it and also believes that this is user friendly, he/she is more likely to develop positive attitudes and intentions towards technology(Cox, Preston and Cox 1999; Jones 2008, Apay et al, 2010). Hence, there is a dire need for further research in this area to disclose what actually lies behind this divergence.

Facilitating conditions and supportive environment had very significant impact upon intentions of the prospective teachers. This conclusion is consistent with contention of Galloghway (2011):‘*One cannot integrate technology in education with a generation of non-computer-users*. ‘The present study has valuable implications for policy makers, administrators and teachers. If we want to make the dream of computer integration in education- a reality, technology role in education must be an integral part of the curriculum of the prospective teachers and special efforts should be made to develop positive attitude among prospective teachers regarding use of computer in classrooms in this regard political will, satisfactory infrastructure, sufficient budget allocation and sound incentive schemes may play an indispensable role. Prospective teachers must be prepared in a way to be keen to employ computers in their respective classrooms otherwise all the strategies designed for this purpose, all the resources invested and all the policies made would be fruitless.

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EFFECT OF METACOGNITIVE STRATEGIES INSTRUCTIONS ON READING COMPREHENSION PERFORMANCE OF HEARING IMPAIRED CHILDREN

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ABSTRACT

The present study observed the effect of metacognitive reading strategies on reading comprehension performance of hearing impaired children study at grade eight in special schools. Three metacognitive reading strategies i.e. planning, self-monitoring and self evaluation were used as intervention on three experimental groups with sample size ten students (boys and girls) in each group. The experimental groups were compared with the control groups without any intervention. Three tools or instruments were used for the data collection. In first phase teachers and students' metacognitive awareness level of reading strategies was measured by a inventory developed by Mokhtari (2002). A two weeks long training was given to the teachers involved in intervention. In second phase to get the homogenized sample English Language Proficiency level of hearing impaired students was checked and students scored more than 50 were part of the sample. Six volunteer teachers were randomly allocated to experimental and control groups. The study was experimental in nature and pre-test post-test experimental design was applied. At third phase of the study before the intervention to experimental groups their reading comprehension performance was measured through a test of reading comprehension, the same test was given to control groups too. After pre-test of control and experimental groups a month long treatment was given to three experimental groups separately on metacognitive reading strategies i.e. planning, self-monitoring and self-evaluation. The findings of the study or treatment had very positive results that each strategy significantly improved the reading comprehension performance of hearing impaired children. It was also found that there was no difference between the reading comprehension performance of boys and girls. But it was found that there were differences among and within the strategies. The study recommended that English teachers of hearing impaired students must apply metacognitive reading strategies to develop and improve the reading skills and the comprehension level. Also the curriculum developers must include the metacognitive reading strategies in developing curricula of language subjects.

Key Words: Reading comprehension, Metacognition Reading strategies, Instructions, Performance, Hearing impaired children.

1. INTRODUCTION

Reading is a basic life skill and the cornerstone of success in school and life. It is the process of constructing meaning from written texts (Rumelthart, 2013). Also a covert activity, occurring in the brain, which made it difficult to know precisely i.e. what happens during the process? The brain coordinates a number of interrelated sources of information in order to read. These sources include linguistic data, prior knowledge (schemata), the conventions of the print (punctuations, paragraphing, typography, spelling), decoding skills, story grammar and expository grammar. Scientific research conducted over the past two decades has produced a more complex, unparalleled array of information about reading (Maheshwari, 2013). Researchers found that readers are more than decoders of the written word. A reader must constantly infer meanings that are not directly stated by the words of a text, but are, nonetheless, part of its essential content (Hirsch (2012).

Language and reading experts concluded that reading perhaps the most important component of learning and education. Teachers spent number of hours in early grade school preparing for reading, helping pronounce the words, and encouraging to understand what had read. Number of researchers found in their studies that English or language teachers who are well aware of their own metacognitive functioning lean to play a more important and significant role in helping hearing impaired students to develop their skills in metacognition (Daley, 2002 Flavell, 1979). Likewise, there are number of researches with findings that students who are well aware of their thinking are more strategic and perform better than those who are low in metacognition awareness level (Rivers, 2001). Livingstone (1996) concluded that there are numerous approaches to metacognitive reading instructions but most effectual involve providing the student with both knowledge of metacognitive process and reading strategies for the improvement of their reading comprehension skill. In contrast to constructivist, the behaviorists pointed out that the topic of reading to be unfit for study; it is also unfit for study with hearing impaired students (Banks, 1985).

Teaching supports students' learning and it is a complex, multifaceted task; no specific teaching behavior can cause all students to learn in all instructions (Rupley, Wise, and Logan, 1986). Effective teaching is difficult to analyze because it represents the interaction of complex

factors. Nevertheless, researchers have shown that quality of teaching makes a significant difference in children learning. Students learn more from effective teachers. According to Rosenshine and Stevens (1984) findings approximately 15% of the variation in children reading performance can be attributed to the teacher's skill and effectiveness. In recent years, researchers have amassed considerable data regarding teaching reading skills in use of instructions based on metacognitive reading strategies (Takallou, 2012). Instruction is a complex concept, researchers agree on the importance of effective instruction and planning for developing reading skills. But there is less agreement regarding how to create effective instruction. Effective teaching or instructions for developing reading comprehension skills differs from situation to situation and from one student to another student. Among effective reading instructional approaches, metacognitive reading strategies are very popular, number of researchers found that metacognitive reading strategies have positive effect on reading comprehension performance of all levels of students and languages like Arabic, Urdu, English, Japanese (Takallou, 2012).

Cognition and Metacognition both have number of concrete effects on students' learning. The author of metacognition theory Flavell said it plays an important role in oral and reading comprehension, problem solving, attention deficiency, memory, social and moral cognition, personality development, communication and planning for reading, self-control/monitoring, and self-evaluation which are key concerns for students' learning and teaching instructions (Daley, 2002 & Flavell, 1979). The same results were found by the researchers conducted studies on effect of metacognitive strategies in reading comprehension performance of students with learning difficulties, hearing impaired and speech disordered. There are number of studies found strong and significant level of relationship between metacognitive reading strategies instructions and reading comprehension performance. Literature reviewed on metacognitive reading strategies effect on reading comprehension performance indicated that much work has been done on normal hearing students and their teachers. Research on hearing impaired students and their teachers has been neglected. As very few researches on dyslexic students, physically handicapped and emotionally disturbed students have been conducted so this research was unique in nature that findings of the

current study would be helpful for language teachers of hearing impaired students, teacher educators/trainers and teacher training departments. The present study was undertaken with the two tasks of measuring the awareness level of metacognitive reading strategies (hearing impaired students and their teachers) and to find out the effect of metacognitive reading strategies on reading comprehension performance of hearing impaired students.

2. METHODS

The study was experimental in nature and pre-test, post-test design and descriptive part to measure the metacognitive reading strategies awareness level of both teachers and hearing impaired students.

2.1 Participants

Participants of the study were from the Sir Syed Academy for hearing impaired students, Rawalpindi. The school is under the supervision of army so after a formal permission, 86 hearing impaired students (48 boys and 38 girls) of grade eight with their 47 teachers (14 male and 33 female) of English subject participated in the study. All the students and teachers provided the information about their awareness level of metacognitive reading strategies through Metacognitive Awareness level of Reading Strategies (MARSIS) developed by Mokhtari (2002). The researcher selected 60 hearing impaired students who scored more than 50 in English Language Proficiency Test (Idrees, 2012) and six teachers for the experiment and control groups through random sample technique. Two weeks long training was conducted for the teachers selected for experimental groups for the orientation about study, metacognition, reading strategies and to develop the lesson plans on three metacognitive reading strategies i.e. planning, self-monitoring and self-evaluation. Formal permission was collected from the parents of hearing impaired students.

2.2 Instruments

Three tests (i) English Language Performance Test (Idrees, 2012) for grade eight consists of three parts Grammar and vocabulary (eight items), reading (30 items) and writing (3 items), (ii) Metacognition Awareness Reading Strategies Inventory (MARSIS) developed by Mokhtari and Sheorey (2002) (30 items) and Reading Comprehension Test (Idrees, 2012) (consists of 30 items) were administered on hearing impaired

students of class eight and their English teacher in four phases of the study.

2.3 Procedure

Phase I: At the first phase the researcher administered the Metacognitive Awareness level Reading Strategies Inventory (MARSI) Version 1.0 (Mokhtari and Sheorey (2002) on hearing impaired students and their teachers to measure their metacognition reading strategies awareness level. The inventory was validated with the help of advisor and experts for use in Pakistani culture and there was no change suggested by the experts.

Phase II: At the second phase English Language Proficiency Test was administered on all the hearing impaired students of class eight to select sample of the study from a homogenized (internal threat) group of students. Total 68 students scored more than 50 in the test. Total six students were selected for the study and eight for the pilot test. Random sampling technique was used for the selection of sample.

Phase III: At third phase of the study a two weeks long training was conducted for the teachers of experimental groups on the research aim, procedure, teacher's role in the research, lesson planning on instructions in view of metacognitive reading strategies, also orientated them on reading comprehension tests. Six trained teachers were selected, three for experimental and three for control groups. They delivered one lectures per day to hearing impaired students for the period of three months.

Phase IV: At the fourth phase reading comprehension performance of both control and experimental groups was measure. It was measured at both levels i.e. before and after the intervention i.e. metacognitive reading strategies planning, self-monitoring, self-evaluation and traditional reading strategies.

2.4 Data Analysis

Data was analyzed with the help of SPSS version 16 and independent sample t-test was applied to measure the difference between pre and post test scores of experimental and control group separately. Paired sample t-test was applied to measure the significant difference between pre and post test scores of experimental and control groups together. The researcher also measured the significant difference between and among the strategies by ANOVA and Post Tukey HSD test was applied for pair-wise or multiple comparisons to identify which pair is significant and which pair

is not significant. For the descriptive part demographic data collected from students and teachers was analyzed in percentage and means. Metacognitive Awareness level of reading strategies was measured by using the key and procedure recommended by Mokhtari (2002) and average mean range with MARSIScore was measured for ranking the Metacognitive Awareness Level of reading strategies of students and teachers.

3. Findings

Table 1
Metacognition Awareness Level of English Teachers

Category	<i>f</i>	Percentage	Average Mean Range	MARSIScore	Rank
High	36	76.59	3.50-4.50	121.361	1
Medium	9	19.15	2.70-3.43	90.777	2
Low	2	4.25	2.03-2.03	61.000	3
Total	47	100.00			

High: 3.5 or higher Medium: 2.5 to 3.4 Low: 2.4 or lower
Most of the teachers with high metacognitive awareness level of reading strategies.

Table 2
Metacognition Awareness Level of Students

Category	<i>f</i>	Percentage	Average Mean Range	MARSIScore	Rank
Medium	46	53.49	2.50-3.47	135.67	1
Low	27	31.40	1.77 – 2.43	56.61	2
High	13	15.12	3.63-4.20	50.40	3
Total	86	100.00			

High: 3.5 or higher Medium: 2.5 to 3.4 Low: 2.4 or lower
A large number of students were found with medium level of metacognitive awareness of reading strategies but a reasonable number i.e. more than 30% were in low level too.

To homogenize the sample from population English Language Proficiency Test was given to all the 86 students and 68 students were qualified for the sample (Table 3). The pass score was 50.

Table 3
Students' Score on ELPT

Student Score	Frequency	Percentage
50 and above	68	79.07
Below 50 %	18	20.93
Total	86	100.00

Before the intervention of planning strategy there was no significant difference between the pre test scores of experimental and control group.

After intervention or treatment of first strategy i.e. planning there is significant difference between scores of experimental and control groups.

Table 4
Independent Samples t- test between Experimental and Control Groups

Strategy	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Planning	6.791	18	.000	6.900	1.016
Self-Monitoring	6.000	18	.000	5.200	.867
Self-Evaluation	8.269	18	.000	6.200	.750

The P-value=0.000 indicates that there is a significant difference between mean scores of the experimental groups treated with metacognition reading strategies and control group without any treatment. Therefore we can conclude that the mean scores of experimental groups and mean scores of control groups are not same.

Table 5
Independent Samples t- test between Experimental and Control Group

Equal Variance	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	11.540	58	.000	6.100	.529

The P-value=0.000 indicates that there is a significant difference between experimental groups treated with metacognition reading strategies planning, self-monitoring and self evaluation and control group treated without these strategies or taught through traditional reading strategies. Conclusion is that mean score of experimental group and mean score of control group are not same.

Table 6
Testing the Mean Scores of Metacognition Reading Strategies and Control Group (Boys and Girls)

Strategies	Sum of Scores	df	Mean Scores	F	Sig.
Among Strategies	281.700	3	93.900	18.432	0.000
Within Strategies	183.400	36	5.094		
Total	465.100	39			

The Pvalue=0.000 indicates that all the strategies have significant difference considering male and female groups. Therefore we can

conclude that the mean scores of all strategies are not same. It also indicates that there is need to apply pair-wise comparison to identify which pair is significant and which pair is not significant.

Table 7
Multiple Comparison using Tukey Honest Significant Test (Tukey HSD)

Strategies	Strategies	Mean Difference	Std. Error	Sig.
1	2	2.400	1.009	.100
	3	.900	1.009	.809
	4	6.900*	1.009	.000
2	1	-2.400	1.009	.100
	3	-1.500	1.009	.456
	4	4.500*	1.009	.000
3	1	-.900	1.009	.809
	2	1.500	1.009	.456
	4	6.000*	1.009	.000
4	1	-6.900*	1.009	.000
	2	-4.500*	1.009	.000
	3	-6.000*	1.009	.000

The mean difference is significant at the 0.05 level.

Pvalue=0.000 indicating the pair reading strategy 'planning' and control group is highly significant. Similarly reading strategy self-monitoring and control group, reading strategy self-evaluation and control group are also highly significant. It may be concluded that reading strategy self-monitoring and self-evaluation differ significantly from the control group.

4. DISCUSSION

Reading comprehension is one of the most important parts for a language learner to master. Most of the hearing impaired students have difficulty with constructing meaning from the written texts. The researchers conducted studies in the field of metacognitive reading strategies and awareness found metacognitive reading strategies are among important factors to facilitate students' reading comprehension. Most of the studies recommended that universities and schools need to actively improve metacognitive reading strategies among all students and awareness among the teachers. Research indicates that metacognitive reading strategies promoted both performance and understanding of hearing impaired students' reading comprehension. The present study has examined or measured the effect of metacognition reading strategies i.e. planning, self-monitoring and self-evaluation on reading comprehension performance of hearing impaired students studying at class eight. It was also intended to examine the effect of each strategy and overall effect of three strategies on reading comprehension. Research supported the claim that metacognitive strategies facilitate students' reading comprehension (Ahmadi, Ismail & Abdullah, 2013). Treatment given to experimental groups had a positive effect on the reading comprehension performance of students (Azizi, 2003). The study also highlighted the important role of English Second Language learners' awareness of their reading strategies in the development of comprehension in the tasks assigned (Mokhtari and Sheorey (2002). The researcher recommended that knowing the metacognitive strategies and being aware of the strategies used can improve reading comprehension performance of hearing impaired students and they can construct themes and meaning from the text (Caverly, et al. (2004), El-Hindi (1996), and Shenkman and Cukras (1986). Study concluded that reading strategy instruction has positive effects on hearing impaired students' metacognitive strategic reading performance in English subject/courses (Takallou, 2011, Othman, 2014 & Susan, 2011). In research conducted by Keene (2008) supported the finding of the study that teachers must give importance to 'planning' strategy over others for positive effect. Also it is not important to use all the metacognitive strategies, therefore, students can use one or two most important strategies to read a text that can give positive effect of students' comprehension performance. The reading with understanding or comprehension skills is only linear and exclusively based on teachers. It is concluded in the study that student performed better if their teachers use metacognitive reading

strategies like planning, self-monitoring and self-evaluation (Shaila & Trudell, 2010).

5. CONCLUSION

The study concluded that reading comprehension performance level of hearing impaired students was improved as compared to students of control groups. It was also concluded that effect of these strategies was same on both boys and girls. Also, the mean scores of these strategies was not same, therefore teachers guided or instructed the students to use first planning then self-evaluation and then self-monitoring performed better than the other preferences. The study is significant to improve the reading comprehension performance of hearing impaired students in the subject of English.

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PREDICTORS OF JOB SATISFACTION: A CASE OF TEACHERS OF PUBLIC AND PRIVATE SPECIAL EDUCATION SCHOOLS IN LAHORE

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ABSTRACT

The study aimed at finding out the predictors of job satisfaction of teachers of special education. The study sought the research questions; what was the relationship between job satisfaction and demographic variables of teachers of special education? What are the predictors of job satisfaction? Are the predictors of job satisfaction of male teachers different from female teachers? The data was collected from a sample of 292 special education teachers through a survey method. A scale namely Job Satisfaction Scale for Teachers developed by Anju Mehrotra (2005) was used for data collection through a survey of special education schools of Lahore city district. The findings of the study showed that individual pay was strong predictor of job satisfaction. There was no difference found for predictors among male and female respondents. Salary is proved to be a strongest predictor of job satisfaction among the participants. This study recommends that there should be practical positive measures and awareness among administrative personnel of school in order to address the situation of job satisfaction among teachers of special education.

Key Words: special education teachers, job satisfaction, predictors, Public & private schools, Special education.

1. INTRODUCTION

Job satisfaction has been linked to various outcomes that are important to both individual and the organization, such as organization citizenship, tenure (Aronson, 2005) maintenance, psychological well-being and over all life satisfaction (Meyer & Allen, 2002). Job satisfaction is defined as contented, gratified feelings or happy state of emotion that results due to appreciation of one's job or experiences during job (Iqbal 2010, Akhtar, 2010).

The satisfaction is a measurable and observable state that must be effectively recognized in order to judge whether the tasks and duties has been completed with conditions (William & Hazer, 2006). Edward (2008), states that job satisfaction is dependents upon a person's abilities that match the requirements of the job and it may also be related to how the person's needs are meet by reinforces in work environment?

Job satisfaction is comprised of many variables. These variables contribute to general satisfaction in different conditions and reflect the facts of job such as growth, pay, coworkers and supervisor. Cranny, Smith & Stone, (1992) take it as the employees reaction to a job which arises by judging real input with the desired outcomes. So it is mostly judged in relation to the expected outcomes. As Sattar, (2013) says that a satisfied worker is always beneficial and committed to his/her organization. Similarly Singh & Greenhouse (2004) are of the view point that satisfaction and performance both depends upon the match that exists between job demand and capabilities of an individual. So if workers in an organization have abilities to full fill job requirement only then they can do well and become satisfied. Teachers occupy central role in the educational system (National Education Policy 1959) but unfortunately the profession of schools is badly criticized throughout the world. Teachers of schools complaint about their social status in the society but sometimes society criticize teachers as irresponsible persons who are unjust to their profession. Teachers' low job satisfaction is a worldwide phenomenon. In this regard, Zembylas & Papanastazious (2004) proposed that there is very strong relation between what a teacher expects from his profession and what is offered to him or her by organization. Zigareli (1996) says that school effectiveness can be predicted form the teachers' job satisfaction. According to Sari (2002) special education in Turkey is patchy, and the quality of education and special education needs (SEN) provision has not

yet reached required level because of principle and teacher's job satisfaction and negative attitude towards education of SEN. Some researchers showed that some of the teachers of special education hardly complete one year and leave the job, whereas majority of teachers who start working in special education schools tend to move to general education. Another study by Lambert (2006) supports the result and reported that approximately fifty percent of teachers after opting the field of teaching profession hardly complete five years and leave their job.

US department (2013) indicated that about 2.5 to 3% of newly appointed teachers leave the profession in first two years. It implies that teachers are dissatisfied with their jobs and did not want to carry on this career. Now the question raises here that why they leave their jobs? This happened because either they have no interest or they adopt this career by chance not by choice?

Brownell, Hirsch & Soe (2004) say that a tremendous shortage of teachers exists in special education schools. Griffin, Winn, Kilgore, (2003) report that "many teachers in special education leave their position after the first year". Billinsely (2004) says that keeping teachers in the profession of special education is becoming serious problem.

Locke (1976, as cited by Augu 2012) discusses major dimensions of job satisfaction that contributes significantly are nature of work, pay, promotions, recognition, working conditions, benefits, supervision and co-workers. Same dimensions are also cited by Wangari & Urodh, (2014). Pay is a tool to help people to live their lives. Sattar (2013) found in his study that salary positively predict job satisfaction. Money is the sole criterion and the most significant motivational factor (Akin, 2000) for majority of employees. Money is one of the motivational decision factors to choose any job. Moreover, Cypriot teachers as Zemylas & Papanstansion (2004) say select this job because of man associated factors such as salary, working hours and holidays. It has been an acknowledged factor that teachers are attracted in the profession due to the higher salaries (Kingdon, 2010). It has also been established that teachers look for those jobs which can enhance their income and ultimately boost up their economic status and solve their domestic problem (Loeb, Darling-Hannond & Luczack, 2005).

A man is a social animal; he/she cannot survive without interaction. Interaction between teacher background characteristics and work place had significant effect on an individual's job satisfaction level (Ma & MacMillian, 1999). Wangari&Urodh (2014), cited Vesallo's findings that "lack of colleague support, less professional development, problem with teachers roles, greater diversity on case load, isolation and inadequate resources all contribute to less job satisfaction and attrition of special educators in addition young special educators are more likely to leave than older teachers" (Vesallo, 2014. P. 128).

Interaction between the supervisors with co-workers enhances the job satisfaction levels. Many studies indicated that relationship of supervisor with subordinate significantly influence the overall satisfaction regarding the job. As Sharma and Joyti (2009) found in their study that some factors; such as management attitude, pay and promotion, opportunities are significantly related to the job satisfaction. Morris (2004, p. 93) postulates that "teacher job satisfaction is affected by the work, environment and strong principal leadership".

The result of Bogler's (2002) study suggested that the teachers who have low level of job satisfaction are different from those who have high level job satisfaction due to certain factors; the leadership style, occupational perception, and demographic variables. He further suggests that the working condition and job satisfaction are interlinked. "Working condition is a factor that has a moderate impact on the employee's job satisfaction and if people work in a clean, friendly environment they will find it easier to come to work"(Bogler, 2002).Billingselly& Cross (2005) (cited by Wangari, 2014, p.126) say that "special educators who keep this field repeatedly go from one school to the other in search of the more satisfied role to play and better working conditions' and play visible role in teacher's job satisfaction" (Jeffrey, 2009). Kirck& Wall (2009) found that the opportunities for professional and personal growth, and salaries are often cited as a factor contributing job satisfaction.

Urge towards advancement is in human nature. When people feel that their future prospects are good they are satisfied. Robbins (2005) sets that promotion in one's job brings; i) avenues for personal growth, ii) recognizable responsibility and iii) enhance the social status. While a

study conducted by Noorjahan, Shivanand & Nayla (2007) concluded that satisfaction level changes with respect to different age group and length of service. The teachers having more teaching experiences are highly satisfied as they have higher confidence in their talent and can face challenges.

Some other researches compare job satisfaction of public and private schools regarding various factors; such as effectiveness, fairness, student's achievements, responsibilities and others (Bracey 2002) and represented in consistent results regarding the job satisfaction of teachers. As Kaur and Kumar (2008) say that public college teachers were found more satisfied when compared with the teachers of private colleges. In contrast, comparison of results of the teachers belonging to the private and public schools showed that private school teachers reported higher level of satisfaction than those who work in public sector (Whitener, 2001). Similarly another study identified age as one of the prominent factor affecting the job and showed that older and experienced employees are more satisfied as compared to the young employees (Davis, 1988). Similar to it the Earnest & Jama's study(2003) found out age as a predictor of satisfaction along with operating conditions. The other factor found was the time duration of job that predicted satisfaction with promotion. Research also point out the positive relation of job satisfaction with age, gender, marital status, grade, level taught and educational level (Bogler,2002).

Ma & McMillian (1999) found that senior teachers significantly showed dissatisfaction with the job as compare to the junior or less experienced teachers. But Rehman & Parveen(2008) found results in contrast to it and said that factors like experience and age of teachers has no impact on levels of job satisfaction.

A lot of studies in general and particularly conducted in education sector have explored the relationship of college teacher's job satisfaction level with gender. Female teacher tend to be more satisfied than male (Aguiree, 2000). Female teachers of secondary level are more satisfied than male teachers (Iqbal, 2010, Sattar 2013). Similarly woman in isolated work place reported higher level of job satisfaction because such type of work place provides them job flexibility (Kieth, Susan, & Heywood, 2005).

It implies that there exists the gender gap in satisfaction regarding job which increases with the increase in capabilities of teaching. However, Herzberg (1996) proposed that different factors of job satisfaction implies different meaning to the male and female workers because a factor that may affects women has no or less affects for men.

Ololube (2007) found in his study both intrinsic (Motivation) and extrinsic (hygiene) are the predictors of job satisfaction. Similarly in another study Nurllah (2010), concluded that self-esteem and value job characteristics are the direct and strong predictors of job satisfaction. Happiness and income positively predict job satisfaction. Employment status was found to be the significant predictors of satisfaction in job (Earnest, 2007). Researchers concluded that academic rank did not predict differences in level of job satisfaction with pay and promotion. Researchers also found no significant predictors among demographic factors for satisfaction with supervision, co-workers, nature of job or work conditions.

Zembylas & Papanstsiou, (2004) found salary and working condition (extrinsic factors) are being the predictors of teaching profession). Kline (2006) found in his survey that teachers with LD's students perceived work load, paper work, meeting, conference and other non-teaching activities were highest predictors of job stress and burn out. Kline (2006) says that "these predictors have negative impact on job satisfaction and commitment to the profession for some special educators".

Conceptually from the above review it implies that job satisfaction is the degree to which employee competes with his/her job that he/she performs and when their important needs and values relating to health, food, security, belongingness, and many others are fulfilled on the job.

Education is one of the most neglecting social sectors in developing countries including Pakistan. Pakistan has to face some serious challenges in the field of special education relating to personnel working in it. A special education teacher is a key component to educate and rehabilitate children with disabilities. Although a special education teacher is a professionally qualified personnel but, there is common assumption that teaching students with special needs is by chance not by choice. So at this time there is need to examine what are the predictors of job satisfaction because dealing student with special needs is a complex task and teacher's

job satisfaction and interest in this field have direct impact on student's learning.

The research intended to achieve the following objectives:

1. To find out job satisfaction levels of teachers of public and private special education schools in Lahore.
2. To determine the predictors of job satisfaction of teachers of private and public special education schools in Lahore.
3. To identify the relationship of job satisfaction with demographic variables of teacher of public and private special education schools of Lahore.
4. To indicate the difference if any between predictors of job satisfaction of male and female teachers of public and private special education schools in Lahore on factors relating to nature of job, etc.

The study also sought to answer the following questions.

1. What are the predictors of job satisfaction of special education teachers working in public and private schools in Lahore?
2. Are the predictors of job satisfaction same in male and female teacher working in public and private special education schools?
3. What is the effect of teaching experience on job satisfaction of teachers working in public and private special education schools?
4. What is the effect of salary on job satisfaction?
5. What is effect of nature of disability type on job satisfaction and vocational interest of special education teachers?
6. What is the effect of age on job satisfaction of teachers in special education?
7. What the difference is between well satisfied and not satisfied group of special education teachers with their nature of job, gender, teaching experience, type of disability, etc.

2. METHODOLOGY

The study was descriptive and conducted through a survey method.

2.1 Population

Lahore city is tagged as district which is divided into nine towns. The population of the study consisted of 187 special education teachers working in public schools and about 281 special education teachers in private schools of Lahore city. 70% of the population comprised the sample of the study.

2.2 Sample

The sample (292) comprised of 113 special education teachers from public schools and 179 from private schools. Sample was selected through systematic purposive sampling from nine towns and cantonment of Lahore city district.

2.3 Instrument

Job Satisfaction Scale for Teachers (JSST) developed by Mehrotra, A.(2005) was used with permission in the study to explore the predictors of job satisfaction. This scale collected responses on five points; “Strongly Agree”, “Agree”, “Undecided, Disagree”, and “Strongly Disagree”. Item numbers 7,8,9,12,17,19,26,29,45,51,58, and 59 were negative so their scoring was reversed.

2.4 Pilot Testing

The reliability of the tool for the research sample was judged through a pilot testing on 10% of the whole population (50 special education teachers) to measure the Cronbach Alpha Reliability Coefficient of job satisfaction scale for Teachers was measured as 0.80. Moreover the two field experts verified the content and face validity of this tool.

3. RESULTS

Descriptive statistics was used to analyze demographic variables. Frequency and percentage of the data on gender, age, marital status, qualification, teaching experience and nature of job was calculated and presented in following tables.

Table 1
Demographic Information1 (N=292)

Variables	f	Percentage
Gender		
Male	44	15
Female	248	85
Age in years		
20-29	148	51
30-39	90	31
40-49	26	9
Above 50	28	10
Marital Status		
Married	154	53
Single	138	47
Qualification		
Matric	16	5
B.A/B.sc	50	17
M.A Special Education	102	35
M.A/M.Sc Others	116	40
M.Phil	8	3
Professional Qualification		
No	235	81
T.D	6	2
B.Ed	28	10
ADCP	22	8
M.Ed	1	0
Teaching Experience (years)		
<below 5	168	58
6-10	65	22
11-15	13	5

16-20	19	7
Above 20	27	9
Nature of Job		
Contractual	86	30
Permanent	189	65
Private/Not Applicable	17	6

Percentage less than 0.5 round down and greater than 0.5 round up

Table 1 shows that 248 respondents (85%) were female and 44 (15%) were male. The age ranges of more than fifty percent respondents was 20-29 years while only 28(10%) were above 50 years of age. Similarly more than fifty percent respondents 154(53%) were married and 138 (47%) were single. Majority (75 %) special education teachers were master degree holder and only 3 % were M. Phil. Most of the teachers (81 %) were having no professional qualification. Majority of teachers were with below 5 years teaching experience. Minimum 5% had 16-20 year experience. Similarly among the participants majority was permanent and 30 % were on contract.

Table 2
Demographic Information 2 (N=292)

Monthly Income (Rs.)	f	%
Less than 10,000	41	14
11,000-20,000	102	35
21,000-30,000	43	15
31,000-40,000	59	20
More than 40,000	47	16
Pay Scale		
Not applicable	148	51
9	12	4
14	9	3
16	59	20
17	61	21

18	3	1
Nature of class student Disability		
Mentally Challenged	76	26
Hearing Impairment	97	33
Visual Impairment	45	15
Physically Handicapped	12	4
Autism	23	8
Multiple Disabilities	14	5
C.P	25	9
Job Sector		
Public	113	39
Private	179	61
Any Other Source of Income		
Yes	24	8
No	268	92
Home Station		
Yes	262	90
No	30	10

Table 2 shows that majority of the respondents (70 %) monthly income was in the range of Rs. 1100/- – 4000/-. Fifty percentage of the participants' pay scale was not applicable while less than 50 % were in the pay scale of 16 – 17. 48 % of respondents tend to sensory impaired and 26 % teach to MRC. Respondents from private sector were more (61 %) than public sector (39 %). Table also showed that majority of respondents 91.8% teachers have no other source of income with their current job and 8.2% had some other sources such as home tuitions with their current job.

Table 3
Gender wise Differences on Factors of Job Satisfaction

Factors of Job Satisfaction	Male		Female			
	Mean	SD	Mean	SD	<i>t</i>	<i>P</i>
Pay	3.17	.48	3.24	0.46	-0.85	0.39
Workload	3.85	.40	3.88	0.495	-0.30	0.76
Working Group	3.60	.68	3.688	0.960	-0.56	0.58
Working Conditions	3.60	.45	3.64	0.41	-0.59	0.55
Supervision	3.27	.55	3.24	0.50	0.35	0.72
Promotion	3.44	.60	3.58	0.53	-0.16	1.03

df=290, significant level<0.05

Table 3 showed that male and female special education teachers have no significant difference in their job satisfaction regarding factors of job satisfaction at($p < 0.05$). So, the results reflected that male and female special education teachers were satisfied on same factors of job satisfaction.

Table 4
One Way ANOVA on Job Satisfaction of Special Education Teachers Regarding Their Nature of Job

	Contract	Permanent	Not Applicable/ Private Sector		
Job Satisfaction	M(Sd)	M(Sd)	M(Sd)	F	p
Pay	3.19(0.43)	3.22(0.47)	3.41(0.39)	1.64	0.19
Work load	3.85(0.37)	3.88(0.53)	3.81(0.35)	0.27	0.75
Work Group	3.68(0.92)	3.70(0.95)	3.3(0.39)	1.42	0.24
Working Conditions	3.65(0.42)	3.62(0.42)	3.68(0.34)	0.29	0.74

Supervision	3.16(0.56)	3.27(0.48)	3.38(0.42)	2.18	0.11
Promotion	3.54(0.58)	3.55(0.52)	3.68(0.53)	0.52	0.59

df=290,significant level<0.05

Table 4 shows there is no significant relationship on factors of job satisfaction regarding nature of job at ($P < 0.005$). It has been found that the teachers who are working on permanent basis have no difference in factors of job satisfaction with teachers who are working on contract basis and also with private school teachers.

Table 5
Effect of Job Satisfaction regarding Student Disability Category

	M.R	H.I	V.I	P.H	Autism	Multiple	C.P		
Job	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	F	<i>p</i>
satisfaction	1.37	1.33	1.37	1.49	1.21	1.35	1.57	0.84	0.54

Table 5 indicates that disability category has no effect on teacher's job satisfaction.

Table 6
Percentage of Respondents and Levels of Job Satisfaction

Factors of Job Satisfaction	Low n(%)	Moderate n(%)	High n(%)
Pay	5(1.7)	42(14.4)	245(83.9)
Work Load	5(1.7)	70(24)	217(74.3)
Work Group	4(1.4)	110(37.7)	178(61)
Working Conditions	3(1.0)	135(46.2)	154(52.7)
Supervision	13(4.5)	60(20.5)	219(75.0)
Promotion	8(2.7)	133(45.5)	151(51.7)

df=290

Table 6 shows that 245(83.9%) special education teachers experienced high level of job satisfaction on pay, 42(14.4%) moderate and only 5%

show low level of satisfaction. Then come supervision with 219 (75%) high level satisfaction 60 % and 13% low level of satisfaction .It is also indicated that 217 (74.3%) respondents show high level satisfaction on work load 70 (24%) moderate and 5 (1.7%) low level of satisfaction. Regarding all job satisfaction dimensions it has been found that the majority of respondent show high level of satisfaction.

The data was analyzed in order to study the predictors of job satisfaction of special education teachers.

Table 7
Correlation existing between the Job Satisfaction and Demographic Variables

Demographic Variables	Salary	Age	Qualification	Teaching experience	Nature of Disability	Nature of Job	Job Sector	Job satisfaction
Salary	1	.536**	.280**	.473**	.239**	.104	.545**	-.210**
Age (years)		1	.039	.826**	-.128**	.216**	-.231**	-.058
Qualification			1	-.027	.039	.098	.139*	-.166**
Teaching experience				1	-.129*	.200**	-.140*	-.024
Nature of Disability					1			.143*
Nature of Job						1	.169**	.199**
Job Sector							1	.043
Job satisfaction								1

**significant at the 0.01 level (2-tailed), *significant at the 0.05 level (2-tailed).

Table 7 depicts strong correlation between some demographic variables such as Salary, qualification, nature of disability and job sector (public/private) with job satisfaction. While age of the participants, their teaching experience and nature of job either permanent or contractual has no significant relationship.

Table 8
Correlation existing between the Factors of Job Satisfaction and Demographic Variables

Factors of job satisfaction	Salary	Age	Qualification	Teaching experience	Nature of Disability	Nature of Job	Job Sector
Pay	-.063	-.103	-.056	-.023	.055	.086	-.008
Workload	-.091	-.032	-.108	-.050	.110	.009	-.231**
Working Group	-.123*	-.020	-.140*	-.050	-.038	-.046	.302**
Working Conditions	-.121*	-.043	-.143*	-.035	-.081	-.007	.105
Supervision	-.212**	.036	-.091	.100	.162**	.122*	.238**
Promotion	-.183**	-.100	-.124*	-.067	.125*	.041	.286**

**significant at the 0.01 level (2-tailed), *significant at the 0.05 level (2-tailed).

Table 8 depicts significant correlation between correlation existing between the factors of job satisfaction such as workload, working group, supervision and promotion with salary, qualification, nature of disability and job sector. While age and teaching experience have no correlation with factors of Job satisfaction. Moreover there existed significant correlation with supervision and nature of job.

Table 9
Summary of Regression analysis of Demographic Variables as Predictors of Job Satisfaction

Predictors of job satisfaction	R	R square	Adj.R square	t	Sig
Salary	.86	.75	.75	29.39	.001*
Age (years)	.058	.003	.000	-9.83	.326
Qualification	.166	.028	.024	-2.871	.326
Teaching experience (years)	.026	.001	-.003	-.45	.653
Nature of class Disability	.048	.002	-.001	.812	.417
Permanent/Contractual					
Sector Public/Private	.056	.003	.000	.947	.34
	.210	.044	.041	3.65	.001*

Dependent Variable: job satisfaction

The R, R square, adjusted R square, t value and level of significant are displayed in table 9. A step wise regression applies on each of the demographic variables. Individual's salary found as the strong predictor of job satisfaction. Public sector was found as the strong predictor of job satisfaction. For the calculation of results public sector ranked 1 and private sector ranked 0. So results found out the teachers are more interested to work in public sector.

Table 10
Regression Analysis for predictors of job satisfaction gender wise

	Male					Female				
	B	SE	Beta	t-value	p-value	B	SE	Beta	t-value	p-value
Salary	1.898E-5	.000	.831	9.289	.000	2.100E-5	2.100E-5	.894	26.628	.000
Age	.006	.048	.022	.134	.894	-.023	-.023	-.061	-1.188	.236
Teaching Experience	.000	.005	-.028	-.172	.865	-.002	-.002	-.39	-.773	.440
Qualification	-.033	.033	-.101	-1.009	.321	.004	.004	.011	.341	.734
Category of Disability	.028	.020	.129	1.442	.158	.004	.006	.022	.694	.489
Job Sector	-.029	.074	-.043	-.396	.695	-.023	.023	-.034	-1.000	.318

Table 10(b)

	B	Std. Error	Beta	t-value	p-value
1 (Constant)	3.079	.020		152.663	.000
Salary	2.024E-5	.000	.865	29.394	.001

Dependent Variable: Job Satisfaction

Table 10(b) shows that salary has the effect on job satisfaction of special education teachers.

Table 11
Effect of teaching experience on Job Satisfaction

		B	Std. Error	Beta	t-value	p-value
1	(Constant)	3.607	.034		104.554	.000
	Teaching Experience	-.006	.015	-.024	-.404	.686

Dependent Variable Job satisfaction

For further analysis Table 11 depicts that when job satisfaction is dependent variable than teaching experience has not impact on job satisfaction of special education teachers. It is concluded that young teachers and experienced special education teachers are satisfied with their current jobs.

4. DISCUSSION

The results of the study found that salary is a strong predictor of job satisfaction. The results are in line with the result of the study by Zembylas & Papanstsiou (2004) who found salary and working condition (extrinsic factors/predictors of teaching profession). The results of the study depict that at individual matter salary is a significant predictor of job satisfaction but at the other side as factor of job satisfaction scale pay is not significant. Abusharia, (2012) concluded that there are no statistically significant differences in job satisfaction among the special education teachers regarding the training they had and they are satisfied with their jobs.

5. CONCLUSIONS

The study concludes that high level of job satisfaction exists among special education teachers. The selection of right job effects employee's income, his/her social status, job and general life satisfaction. The appropriate matching of employees with the job increases the productivity and decrease the turnover of the employer.

The study indicated that teachers are satisfied with their current job. Since the results of the study identified the predictors that assess teacher's interests, abilities, personality in terms of how they match the specific occupational environment they are working in and job satisfaction, it is concluded that "salary" "job sector" and "work group" are strong predictors of job satisfaction of special education teachers. When salary is

appropriate, the teachers are satisfied with their job. Co-workers or colleagues are a part and parcel for employee at work. On the other hand, this study proved that teachers have chosen their occupation in accord with their interests and abilities. So, they are satisfied to work in a group.

6. RECOMMENDATIONS

On the basis of analysis of the study, following recommendations were made

1. Majority of teachers are highly qualified but students' performance is still questionable, further research can be carried out on to investigate other factors of student's poor performance.
2. Majority of teachers are satisfied with the job, so focus should given to improve curriculum, provision of facilities as well as infrastructure in order to achieve objectives of rehabilitation of special needs students.
3. Orientation and awareness program's may be arranged for all sections of Department of Special Education to help plan for favorable situations in which special education teachers use their full potential for the achievement of the objectives of the rehabilitation of person with special needs. It is need of the time to expand the special education services so that the maximum number of special population may be benefited.
4. For effective management or special schools, it is suggested to conduct more studies, may be on initial experiences of teachers working with special need students.
5. Same study may be conducted on educational institutions of other cities.

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EFFECTIVENESS OF SELF-INSTRUCTIONAL MATERIALS IN MINIMIZING LEARNING DISABILITY OF STUDENTS IN SECONDARY SCHOOLS

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ABSTRACT

The present study is aimed at finding out the effectiveness of self-instructional materials consisting of programmed learning and supervised learning module and a modern instructional strategy namely guided inductive inquiry model in minimizing learning disabilities of students in secondary schools. It is assumed that student achievement depends upon the method of teaching adopted. Since lessons in biology for grade IX on the topic Reproduction in Plants were not available in self-instructional materials and modern instructional strategy the investigator prepared programmed learning materials, supervised learning module and guided inductive inquiry lessons on the topic selected for the experiment. The achievement test in biology for the same topic was prepared and standardized by the investigator. The investigator conducted the experiment in intact unequated classroom groups and then the groups were equated statistically by applying the technique of analysis of covariance to analyses the pretest and posttest scores. The major conclusions that emerged from analyzing the data revealed that the self-instructional materials and the modern instructional strategy are effective in the achievement of biology for Grade IX LD and ND students.

Key Words: Learning Disability, Learning Disabled, Self-Instructional Materials, Programmed Learning, Supervised Learning Module, Instructional Strategy.

1. INTRODUCTION

The field of learning disabilities is very complex for several reasons. First, numerous definitions of the term have been proposed in a very brief time span since the term was first used in 1963. These definitions are related to different perspectives on learning disabilities. A second reason for complexity in the field is the diversity of the professionals concerned with the disabilities of children. Many of the historical figures that did research leading to the development of the field were working independently of others who worked in the same general area. Finally, because of the relatively late consolidation of the field, much of the initial research with children who exhibited learning disabilities was conducted by researchers whose primary focus was in educational psychology and learning problems in a general sense, rather than on learning disabilities themselves.

Since no national census of the learning disabled has been taken in Pakistan, it is difficult to assess their actual number. Neither the Federal nor the provincial governments has data regarding the learning disabled students. The researchers generally depend for their work on the figures available mainly in the U.S.A. In Pakistan the learning disabled students are not identified using reliable tests; nor are they given special support and services.

In the absence of reliable data in Pakistan there is a growing concern over how to meet the needs of the learning disabled students. Mainstreaming which is the regular class placement of individuals with mild learning disabilities is necessary in the context of Pakistan, while the severe cases are referred to the special schools. A functional system that will focus on teaching and learning disorders common to several categories of handicap is found beneficial. A proposal known as the regular education initiative (REI) encourages more integration of learning disabled and other low achieving children in the regular class and less in special class (Lerner, 1989).

The models already available are not feasible in our classroom, because of the limited facilities. Some such models are Content Enhancement Model (Lenz, Bulgren and Hudson, 1990). Teaching and Learning Model (Bose and Anders, 1990) and Strategies Intervention Model (Lenz, 1992). Unlike in many countries, the special education teachers are not appointed in our

schools for co-teaching, collaboration and consultation rather than for direct teaching. Our teacher-training program does not contain provision for practice in teaching the students with learning disabilities. Today the regular classroom teachers are not supposed to teach the students with learning disabilities with careful thought, planning and supervision. In all schools we come across a considerable number of children with either mild or moderate learning disabilities at all stages of education, pre-primary to higher education. It is in this context that there is an urgent need to study an alternative to improve the academic achievement of children with learning disabilities.

Several alternatives are proposed. Among them the most important are inclusion of special education training program in the teachers' training courses and in-service training to all regular teachers. All these are long term training programs. A new program, which can be immediately implemented, is the need of the time.

The cognitive theories of learning disabilities imply that learning disabled children have deficits in cognitive processing abilities that impede their ability to learn. The LD students' poor performance is related to (1) deficiencies in several areas of cognitive function (2) difficulties in coordinating and integrating cognitive function and (3) the integration of various control strategies to make maximum use of the system (Swanson & Watson, 2009). Wong (2005) has pointed out the importance of promoting content learning for individuals with learning disabilities. Over the past twenty years the research had been concentrating on developing instructional models for teaching within the content domains (Bos & Anders, 1990; Mastropieri & Scruggs, 1988).

In Pakistan most of the teachers feel comfortable in the lecture method of explaining the facts that are presented in the prescribed textbook. This kind of teaching could hardly provoke the students to learn actively. So the students confine their learning to the memory level only. Both the groups of the learning disabled and non-disabled students embark on passive learning. In the long run, the academic achievement of the learning disabled children becomes very low. The teacher is unable to consider the needs of the individuals with learning disabilities. Few teachers are experienced in methods of adapting the curriculum or adopting methods embedded with the cognitive theories of learning. They

face several challenges related to selecting good models of instruction that can be most effectively and efficiently applied to instructing children with learning disabilities.

Morsink, Soar & Thomas (1986) suggested several methods that are suitable for working with students with learning disabilities. "Yet there is need for more research on effective teaching methods with applications for learning disabled students" (Lerner, 1989). The investigator presumes that selecting some instructional devices based on self-study approach can enhance academic achievements of students with learning disabilities. It is assumed that if teachers select such methods that would spur their thinking and activate the thinking process, the LD students would then be able to perform satisfactorily in the school subjects. There are modern instructional devices that are based on self-study approach and thinking process. The researches cited above encourage the investigator to undertake a study on the effectiveness of self-instructional materials and modern instructional strategies in ameliorating the problem of enhancing the academic achievement of LD students by remediating cognitive deficits.

The problem that the teachers confront with is how they could enhance the performance of students whether they are learning disabled or non-disabled. The major handicap with the teachers in the regular schools in India is that they were not trained in tackling the problem of children with learning disabilities. So it is not feasible to introduce the innovative models of teaching specially developed for teaching students with learning disabilities. The investigator therefore attempts to test the effectiveness of some methods that would keep the students active and improve higher level cognitive skills.

2. METHODOLOGY

2.1 Hypothesis

The children with learning disabilities show deficiencies in various areas of cognitive function. If these deficiencies are minimized they will be able to perform in a better way. The self-instructional materials and the modern instructional strategies are focused on developing students' thinking ability through their activities. The investigator therefore assumes that if these

strategies were adopted for teaching, children with learning disabilities would also achieve in school subjects considerably.

2.2 Design

The design selected should be able to accommodate the testing of the effectiveness of some instructional strategies with that of the conventional teacher centred approach in minimizing learning disabilities of students in secondary schools. There are statistical techniques like Analysis of Covariance to overcome this difficulty, even if we do the experiment in the natural classroom groups, which are normally non-equated groups. The investigator therefore decided to conduct the experiment in intact non-equated classroom groups. The nonequivalent pretest -posttest design was selected for the study.

For the experiment adopted for the study, experimental and control groups of students were selected from four private educational institutions of Karachi following the Sindh Textbooks syllabus. The initial sample consisted of all the students studying in IX standard in the selected schools (N=895). All these schools were matched on instructional variables, viz., medium of instruction, qualification of teachers and teacher pupil ratio. The institutions chosen and the number of students in each of the experimental groups is given in Table-1.

Table 1
School-wise break-up of the sample selected

School	No. of Students
School – A	210
School – B	220
School – C	235
School - D	230
Total	895

2.3 Variables

In experimental studies the condition that is varied is referred to as the dependent variable. If the effect of the teaching strategy is measured by means of achievement test, then the scores on the test is referred to as the dependent variable. In the present study, the programed learning material and the supervised learning module for self-study and the guided inductive inquiry lessons for modern instructional strategy were to be tested experimentally for their effectiveness by comparing with that of the conventional lecture demonstration method.

2.4 Criteria for Identification of the Learning Disabled Students

To identify LD students studying in regular schools, the investigator plotted a regression graph with Grade as the independent variable and the first terminal biology test scores as the dependent variable. From the regression graph those falling below the regression line were initially selected as LD students and those above as ND students.

2.5 Instruments Used for the Experiment

2.5.1 Programmed Learning Material

The investigator referred to different available programmed learning materials in Biology. Since the topic "Reproduction in Plants" was not found among them finally decided to prepare it by analyzing the content to suit the needs of the children with learning disabilities.

The content was analyzed in terms of behavioral objectives. In order to test the pre-requisite knowledge of the students a test of entering behavior was prepared. The learning material was then divided into frames. Each frame was a small segment of subject matter that called for particular student responses. The student was asked to make the response in every frame. The correct responses were provided at the end of the material for the students to refer to after each response. Prompts were provided on the program frame to guide the student for making correct responses.

The steps taken to develop the material are: (i) selection of topic, (ii) formulation of broad objectives, (iii) specifying objectives in behavioral terms, (iv) development of control outline, (v) analysis of objectives, (vi) analysis of content, (vii) development of the frames, (viii) tryout of the program (ix) provision for student activities, and (x) feedback.

2.5.2 Supervised Learning Module

In the schools in Karachi the module as a learning material is not used. Being a self-directed study, module is suggested to be used by the students without depending on the teacher. This type of self-study is unknown to the students in the various schools of Karachi. So the investigator decided to develop a Supervised Learning module on 'Reproduction in Plants' under the following steps:

- a) The topic 'Reproduction in Plants' was selected and broken into several manageable units
- b) Performance objectives for the modules were formulated
- c) The level of mastery or competency needed by the learner to begin the activities was determined. For this a prerequisite test was administered.
- d) The prepared modules were compiled in the form of a booklet, which contained the title, overview, instructions to the users, objectives, learning activities and formative tests.

The prepared modules were tried out with twenty children of grade IX and their difficulties were noted and analyzed. The modules were modified according to the observations made by the investigator and comments of the students, teachers, educators and colleagues.

2.5.3 Achievement Test in Biology for Standard IX

Since no specific achievement test in the selected topic was available to test the effectiveness of the treatments on students' performance in biology, an achievement test in biology for standard IX on the topic Reproduction in Plants was prepared by the investigator. This was used as the pretest and posttest. The test items were prepared based on a blueprint. Table 2 shows the blue print for the final test consisting of fifty items.

Table 2
Blueprint of the Achievement test in Biology for Grade IX

No.	Content/Objectives	K	U	A	S	Total
1.	Reproduction	2	1	-	-	3
2.	Asexual Reproduction	2	2	1	-	5
3.	Vegetative Propagation	1	2	1	-	4

4.	Artificial Propagation	1	2	1	2	6
5.	Parts of a flower	2	3	1	6	12
6.	Pollination	2	2	5	1	10
7.	Fertilization	2	3	4	1	10
TOTAL		12	15	13	10	50

K = Knowledge, U = Understanding, A = Application, S = Skill

For tryout the test was administered to a group representing the whole population. The students' answers were examined with a view to locating the changes needed in the test. The modified test was administered to a stratified sample of 100 students of standard IX from two schools. Items having difficulty index between 0.25 and 0.75 and discriminating power above 0.25 were selected for the final test. The reliability was determined by using the Kuder Richardson formula. The obtained score is 0.86. This shows that the test has high reliability.

2.6 Experiments Conducted

As the present study is aimed at finding the effectiveness of self-learning materials namely programmed learning material (PLM) and supervised learning module (SLM) and a modern instructional strategy namely guided inductive inquiry (GII), the experimental method was adopted. Three experiments were conducted by comparing the effects of the methods selected for study with that of the lecture demonstration method (LDM) in the learning of LD and ND students.

2.7 Statistical Methods Adopted

Since the experiment was conducted using intact, unequaled groups, Analysis of Covariance (ANCOVA) was applied for analyzing the final scores. ANCOVA thus facilitates the researcher for statistical equating of groups.

3. FINDINGS

Hypothesis 1: There is no significant difference in the initial and the final achievements of the secondary school students with learning disabilities when self-study approach and modern instructional strategies are adopted for their teaching.

The results of the experiments clearly indicate that the self-instructional materials and modern instructional strategy are effective in minimizing learning disabilities of secondary school students. Student's achievement under programmed learning method (PLM), supervised learning module (SLM) and guided inductive inquiry (GII) were found high from the significant difference between the pretest and posttest scores in the achievement test in Biology. In addition, the adjusted means of the posttest scores also showed that all the three strategies are very effective in the achievement of LD students. The findings are given below:

(i) The 't' value obtained from the paired 't' test for pretest and posttest scores in Biology of the LD students (PLM = 26.59, SLM = 51.33, GI1 = 38.86) are highly significant at .01 level indicating PLM, SLM and GI1 are effective methods.

(ii) The adjusted posttest mean scores of the LD students studied in the self-study approach (PLM = 32.42, SLM = 28.31) and modern instructional strategy (GII= 31.07) for the maximum score of 50 are very high.

The null hypothesis is not accepted on the basis of the above findings. On the other hand, it is conclusively accepted that the self-study approach followed in Programmed Learning Method (PLM) and the Supervised Learning Module (SLM) and the modern instructional strategy followed in the Guided Inductive Inquiry (GII) are effective strategies for high achievement in Biology by students with learning disabilities.

Hypothesis 2: The self-study approach and the modern instructional strategies do not differ significantly from the traditional lecture demonstration method in the achievement of students with learning disabilities (LD) of the secondary schools.

The findings obtained when the above hypothesis was tested for its tenability are given below:-

(i) LD students under programmed learning material (PLM), supervised learning module (SLM) and guided inductive inquiry (GII) scored higher in the achievement test in biology than their counterparts in the lecture demonstration method (LDM) group.

The test of significance of the difference between mean gain scores of each of the experimental groups and control group and the higher mean scores show that self-instructional materials (PLM&SLM) and modern instructional strategy (GII) are more effective than the conventional lecture demonstration method (LDM) in the achievements of students with learning disabilities. The results are:

- (a) Between PLM (M=16.94) and LDM (M=12.28) CR = 5.68; $p < .01$
- (b) Between SLM (M=14.24) and LDM (M=12.28) CR = 2.59; $p < .01$
- (c) Between GII (M=16.16) and LDM (M=12.28) CR = 3.98; $p < .01$

(ii) When the adjusted means of posttest scores obtained by ANCOVA and correlation and regression were tested for significance of the difference among them, all the three methods namely PLM, SLM and GII were found significantly more effective than the conventional lecture demonstration method in the achievement in biology of students with learning disabilities. The results are:

- a) Between PLM (My.x=32.42) and LDM (My.x=21.45) $t = 7.89$; $p < .01$
- (b) Between SLM (My.x=28.31) and LDM (My.x=21.45) $t = 4.93$; $p < .01$
- (c) Between GII (My.x=31.07) and LDM (My.x=21.45) $t = 6.96$; $p < .01$

(iii) Objective-wise analysis of the achievement scores of the LD students showed that the self-instructional materials and modern instructional strategy were more effective than the traditional method of lecture demonstration.

Knowledge	PLM & LDM	SLM & LDM
	CII & LDM	
	My.x 8.85 & 6.53	8.67 & 6.53
	8.37 & 6.53	
	t = 5.52 p<.01	5.09 p<.01
	4.83 p<.01	
Understanding		
	My.x 10.03 & 5.98	9.18 & 5.98
	9.83 & 5.98	
	t = 8.13 p<.01	6.43 p<.01
	7.7 p<.01	
Application		
	My.x 8.36 & 6.49	6.83 & 6.49
	8.17 & 6.49	
	t = 3.55 p<.01	0.643 p<.05
	3.17 p<.01	
Skill		
	My.x 5.06 & 1.51	3.38 & 1.51
	5.06 & 1.51	
	t = 8.11 p<.01	3.81 p<.01
	5.69 p<.01	

All findings except that of SLM & LDM under objective, Application make clear that the null hypothesis cannot be accepted. They support the conclusion that the self-instructional materials (PLM & SLM) and modern instructional strategy (GII) are significantly more effective than the conventional lecture demonstration method.

4. DISCUSSION

The findings obtained by statistical analysis of the data reveal the relevance of appropriateness and applicability of the study. In recent years researchers were concentrating on evolving individualized instructional strategies based on cognitive theories. These strategies were found more effective than the traditional method of teaching.

When the investigator reviewed all available individualized instructional materials, noticed that the researchers did find the new strategies more effective than the traditional lecture demonstration method of teaching for all students, but they did not find their effectiveness in achievement of the students with learning disabilities. The results of the present study however are related to the effectiveness of the self-instructional materials namely programmed learning and supervised learning module and a modern instructional strategy based on the development of cognitive skills namely guided Inductive inquiry model in minimizing learning disabilities of high school students. It also aimed at comparing the effectiveness of these methods in the achievements of biology by LD and ND students. Teachers are therefore able to select the most appropriate method for class teaching in accordance with the needs of the students.

The studies on programmed learning by Madhu Mohan (1998) show that individualized instructional materials are more effective than the traditional lecture demonstration method for non-disabled students. Sahajahan (2008) has proved that instruction through modules is very effective for all levels of students and it is found more effective with regard to low achievers and slow learners.

Leonard and others performed three studies examining the effects of different types of inquiry activities, essentially structured vs. guided inquiry (Leonard, Cavanaugh & Lowery, 1981; Leonard, 1983 & 1989). They found that students reasoning abilities improved only with learning cycles featuring guided and open inquiry type activities.

The present study was extended to the comparison of programmed learning materials supervised learning materials and guided inductive inquiry method with the traditional lecture demonstration method in the achievement of biology. The results reveal that these methods are more effective than the traditional lecture demonstration method in the achievement of biology by both the ND and LD students.

The present study compared the progress made by the LD students. The results revealed appreciable progress by the LD students in achievement in biology. This finding is in conformity with the earlier works of Bose and Anders (1990) who developed instructional materials and tested them for their effectiveness and found them effective in enhancing content

knowledge. They said that these strategies were effective only. But the present study gives, in addition, the progress made by the LD students when their achievements were compared with those of the LD and ND students who studied biology in the traditional lecture demonstration method (LDM).

Another important result of this study is related to the attainment of learning objectives. All the three methods tested were found more effective than the traditional lecture demonstration method in attaining the learning objectives namely knowledge, understanding application and skill. The same result was obtained by Madhu Mohan (1998).

Many a study shows that a large number of children in our schools experience learning disabilities in one form or the other. Special attention is required when a child has significantly greater difficulty in learning than most children of his age. The present study shows that in the sample selected for study, twenty three percent of students have disability in learning. They were not given any special care in their studies nor do teachers identify them as the learning disabled. From the findings of the study, it is obvious that the learning disabled would also show considerable progress if the teachers select the instructional strategies that would remove their mental deficit. Three such strategies were tested for their effectiveness in enhancing the achievement of the students with learning disabilities. It was found that the Programmed Learning, Supervised Learning Module and Guided Inductive Inquiry are very effective strategies to teach the learning disabled students. Since all the prescribed subjects were not analyzed and developed in the form of lessons based on these strategies, the authorities can develop centrally the materials in those strategies and supply them to the schools.

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DESIRING INCLUSIVITY: REDRESSING THE SOCIAL AND ACADEMIC PROBLEMS OF VISUALLY IMPAIRED STUDENTS IN HIGHER EDUCATION

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ABSTRACT

In Pakistan, various institutional challenges hinder the integration of visually impaired students with ordinary students in higher education. This case study attempts to identify different problems encountered by visually impaired students at the university level. The study furthermore explores the coping strategies they use to manage their academic and social needs in a competitive university environment. The study was carried out at the University of the Punjab Lahore. In-depth interviews were conducted with visually impaired students and university administrators. Thematic analysis of data reveals problems relating to admission procedures, staff behavior, mobility, attitude of peers, access to course materials, hostel facilities, mode of examination and financial aid. Technology has significant role in the education of the visually impaired students. Training of teachers and staff is also important to integrate the students with special needs. The visually impaired students developed individual coping strategies for negotiating university challenges. The coping ability of students depends heavily on the nature of impairment and background of the individual student. This study can inform all-inclusive policy initiatives at Pakistani universities for making university experience more encouraging and rewarding for visually impaired students, and disabled students in general.

Keywords: Inclusive education, visually impaired, disability, high education, university.

1. INTRODUCTION

A growing concern of the government, international agencies and non-government organizations in Pakistan has been to mainstream the people with disabilities in society by providing them free education in a system that caters to their special needs. The National Policy Education 1998 of Pakistan and National Policy for Person with Disabilities 2000, acknowledge state's responsibility for providing free and fully inclusive education to students with disabilities and set policy parameters for educational institutions to achieve this goal. The Higher Education Commission emphasised and devised policy for inclusive education at the university level. It encouraged the students with disabilities to study in an inclusive education system. However, without proper implementation at the university level these provisions are not adequate to address the problems of students with disabilities especially the visually impaired.

Scholars believe that the social exclusion of disabled individual comes at a great cost to both the societies. And the disabled individuals. At the university level, this occurs when students with impairment are admitted in special need institutes instead of being educated in mainstream institutions with regular students. Studies reveal that disabled students in exclusive systems are less integrated with society and find it difficult to compete with students without difficulties (Young, 1990; Buckup, 2009; and Allan, 2010).

The sociology of disability identifies the structural and material barriers, which disabled individuals face in exclusive systems as compared to inclusive education systems. Presently, the inclusive education model has been adopted internationally by universities around the world to enhance social integration of individuals with disabilities. However, implementation of this system requires that disabled students be provided the social, economic and technological assistance necessary for enabling these students to be able to compete with students without disabilities. Improper or lax implementation of this model can expose disabled students to greater risks than they would in the exclusive education model. Hirsch (2010) reported that the dropping rate of students with disabilities is increasing at university level around the world.

In Pakistan, the admission in universities is competitive and marginalizes the students with disabilities (Hameed, 2008). There are only 2% reserve

seats for disabled students. The process of admission is not transparent and fair. Furthermore, the universities in Pakistan are not socially sensitized or technologically equipped to cater and intergrate disabled students (Hameed, 2008). This study examines the academic and social constraints that hamper the integration of visually impaired students in mainstream educational scape. Moreover, sustainable remedial strategies are highlighted to eliminate these problems.

2. MATERIALS AND METHODS

This paper presents a case study of visually impaired students in the University of the Punjab, which is an inclusive education institution. The case study method gives understanding of social world by allowing deep analysis of social units and social institutions (Feagin & Orum, 1991; Baxter & Jack, 2008). In case study the components of case, boundary and population are defined. University of the Punjab, Lahore was universe of research. The population of this study is the visually impaired students. These students are enrolled in various faculties and centers in different programs in inclusive settings. Punjab University is selected as case for research because it is the largest and the oldest educational institute in public sector. There is diverse population in university from different backgrounds.

In depth interviews of the students with visual impairment from different departments in university were conducted. Moreover, relevant university administrators were also approached to share their views. A purposive sample of university administrators was selected for interviews based on the nature of their duties within the university. The purposive sampling is the most effective for case study for selection of apt for cases for specified research. Snowball sampling technique was used to interview visually impaired students. In purposive sampling the researcher takes those cases or units which are according to nature of study. Snowball sampling technique was used because the researchers were unable to find a list of all the visually impaired students studying in the University of the Punjab. Overall, a total of 16 visually impaired students and 6 university administrators were interviewed. Both male and female visually impaired students were interviewed.

The designing of data collection tool was most crucial stage of the study. The researchers reviewed relevant literature, visited different educational

institutes, had formal and informal talks with experts in area of research and potential respondents. All these data were transcribed and analyzed to generate a culturally sensitive and comprehensive interview guide. The interview guide asked visually impaired respondents to share the experiences at different stages in their university life. It included pre-university admission process, experiences during classes, exams and field activities. The interview guide was designed to provide in-depth understanding of problems that visually impaired students faced at different stages of their university career. The interview guide was pretested before data collection. The medium of interview guide was Urdu. Audio recordings of the interviews were transcribed into English and the English text was later thematically analyzed.

3. FINDINGS

The following themes evoke a lurid picture about the concerns faced by visually impaired students while negotiating their identities in the university settings.

3.1 Admission Policy

The respondents faced various problems at the time of admission. These major problems include understanding admission procedures and admission policy, and preparing the documents required for admission. The admission policy sets a minor quota for disabled students. However, this is a general quota for all disabled students and no specific quota has been set for visually impaired students. Therefore, there is a competition among students with different disabilities to qualify for same disability quota.

The admission process is time consuming and not transparent. One of the respondents informed that “admission process for disabled students is lengthy as compared to the students without disabilities, and entails a lengthy process of assessment of disability.” It was mentioned that resultantly the regular classes in the semester may start weeks before the visually impaired students and students with other disabilities can formally join them. This has an adverse effect on the academic performance of the visually impaired students in the first semester.

3.2 Attitude of Others

The students with visual impairment hesitated to disclose their impairment because they did not want sympathetic feelings from others. One of the respondents stated that “we would rather suffer other students’ indifference than be pitied by them”. Unable to express their feelings and in trying to avoid the stigma of being called ‘blind’, most of the visually impaired respondents expressed that they had felt isolated. Almost, half the respondents felt that problem could be resolved simply educating their peers. One of the respondents opined that “most of my class fellows ask questions because they want to understand my problem and help in any way they can. I respect their intentions but I sometimes feel tired of answering the same questions again and again”.

Majority of the respondents believed that the teachers and instructors showed sympathy to students with impairment. However, lack of training and technology forced teachers to sometimes exclude visually impaired students from class activities. A majority of the respondents felt excluded from class room discussions. Almost all respondents corroborated that a majority of the teachers did not assign presentations and class assignments to visually impaired students, even though they received grades. One of the respondents explained that “I usually do not have to make presentations or submit assignments that require literature review. Teacher gives me a final grade based on my midterm and final exam, which is usually above average”. Overall, the students with visual impairment felt marginalized and often ignored in the classroom settings.

For understanding the lecture notes and completing the class assignments, the visually impaired students relied mainly on their friends and class fellows, and less on their instructors. Most of them acknowledged that they were able to develop good friendships early on and had a very close group of friends. These groups provided them the social and academic support that they needed to meet the academic rigors of university education and university life in general. Findings revealed that visually impaired students found more help and understanding among their peers as compared to the faculty and university administration.

3.3 Course Materials

All respondent had major problems related to course materials. The student with visual impairment cannot read the normal prints. The totally blind students have major problem to access the course material. All respondents corroborated that no course materials were available in braille. Those students who had a personal computer or a laptop usually used screen reader programs to read. However, most of the course books are not available in a soft copy and therefore even those visually impaired students who had access screen reader programs did not find them very helpful. Therefore, a majority of the visually impaired respondents did not end up reading the course books at all and relied only on the lecture notes and slides which were usually available in softcopy. However, the partially visually impaired students managed to read notes in large print. Some of them got help from friends to make audio recordings of the lectures or take down lecture notes in large handwriting.

3.4 Examination

University has four modes of examination: by using computer, braille, audio recording and with help of a writer. Each format has problems. In computer type exams, most of students had no formal training or computer literacy. Since, the university mainly relies on paper based exams it is not possible for each student with visual impairment to take examination through computers.

In university, there is no availability of braille machine except in the Special Education Department. The teachers and even most of the visually impaired students, do not know to write with braille machine. The audio recording format of examination is rarely used in the university. According to the respondents, even though they would find this format most helpful of the four modes of examination, their instructors usually discouraged the audio recording format. *“The teachers usually make the excuse that that they do not have the time to listen to audio recordings”* observed one of the respondents. Most of students with visual impairment appeared in examination with help of a writer. However, respondents pointed out that there are many problems with this format. Time shortage and barrier in communication were two major problems with this mode of examination. It takes time to describe answers to essay type questions. Sometime it is difficult to make the writer understand the answer in an examination hall, where other students are also taking their exams. It takes

extra time, and there is no provision for giving extra time to students with visual impairment during examinations.

Moreover, the availability of writer is also a problem for visual impaired students. The writers are often friends and do not charge anything, but sometimes the visually impaired students have to pay the writers out of their own pockets. The writers are not provided by university examination cell.

3.5 On-Campus Facilities

Library, Computer laboratory and employment Campus facilities include library and computer laboratory do not generally cater for visually impaired students. There is no special center for students with disabilities in the university. The respondents reported that there are some facilities available for catering blind students. However, these are not very helpful since the staff is not trained and does not guide visually impaired students on how to access and use these facilities. Visually impaired students have no access to books. There is no staff training to scan book for them. There is no digital library for the students with visual impairment.

Assistive packages of software are available in the computer labs for using computers and internet facility. But, the computer laboratory staff is not aware of these software packages. However, some of the departmental labs had installed talking software on computers, which the students found helpful.

The students with visual impairment gave positive feedback about technology usage in education. However some students have problem with multimedia usage in class, because they cannot see images and diagrams on screen. Although students think that the technology is helpful in education in different ways like soft copy of notes, e-books, speaking software and assistive software. However, only the students having prior training of technology in pervious education institutions are able to use these technologies. University does not provide them with any specialized training on how to use these technological aids.

A generous amount of scholarship is awarded to the students with disabilities by university. This scholarship is not enough for students with disabilities as the visually impaired students have problems related to

finance because they need special technology assistive device for study purposes. They need printer for large print which partially visually impaired can read. Some of respondents also argue their financial problems could be resolved if the university helped them to get part time jobs on campus.

3.6 University Accommodation and Mobility

The respondents reported that they face problems during allocation of rooms. The entire hostel facility did not have any rooms that were specifically designed for visually impaired or disabled people. While living in hostels, visually impaired students found it difficult to move about the hostel compound, especially for taking their meals.

The students with visual impairment cannot move easily from one place to other. The respondents who were day scholars had their own pick and drop facility. However, they had problems to move within their departments. They had limited option of transportation for going to other departments or to the main library. For new visually impaired students moving about the campus is difficult since they are not familiar with the campus routes. It is even hard for them to reach departments from the hostel compounds. However, with the passage of time they start familiarizing themselves with these routes. The university does not provide any training to visually impaired students about how to move about campus on bus or on foot during. The visually impaired students have to learn about these things from other students or through trial and error.

Interviews reveal that there is no effect of disability on social circle. The most of respondents were friends with both students with and without disabilities. At beginning the respondents reported that they had limited social group but as time passed they were able to make friends. As one respondent stated that “when I was in school most of my friends were blind. I was also friends in the family like cousins etc. But, in the university most of my friends are students without disabilities.” However, limited mobility does to some extent hamper the visually impaired students’ ability to socialize as well.

4. DISCUSSION

The study reveals that once admitted into the university visually impaired students and disabled students in general faced many problems that hampered their social and academic integration. Ironically, the education policy of Pakistan envisions an inclusive education system at the university level, whereas in reality the entire university experience consistently marginalizes disabled students. Problems begin at the entry level, when students with disabilities have to fulfill the requirements of the university's admission policy, implemented by university administrators that have not received any formal training of dealing with disabled students. Students negotiate this cumbersome process on their own. Since there is no centralized or organized system of guiding them they have to rely on personal helpers and student volunteers get through the admission process. Fuller et al. (2004) also identified the students with disabilities do not adequately guided at time of admission. Specifically, the admission policy is not affective and supportive for students with visual impairment. Hameed (2008) stated that admission for disabled students not transparent at university level and in fact marginalized them.

Individuals with disabilities are considered minority groups (Fine & Asch, 1988). There is discrimination, stereotype and negative attitude towards them. Attitude toward disabled especially visually impaired is very significant for disabled individuals because it reflects the extent to which the society is willing to accept or sympathize with their disability (Altman, 1981). The integration of students with disabilities in inclusive education depends upon the attitude of others students, instructors and administration at university level (Fichten, 1988). The respondents reported that the attitude of the other students and faculty members is usually sympathetic. However, visually impaired students consistently showed dismay over the fact that they had to actively use their disability throughout their university life to gain sympathy of their peers and faculty members. Furthermore, the help that they received was usually given in the form of personal or informal favors. In a system that does not formally protect and empower disabled students, their sense of self-reliance is discouraged as they forced to become more and more dependent on their peers and instructors to perform their basic tasks as a university students. For instance, interviews revealed that visually impaired students were reliant on others to prepare their class assignments and take their midterm and final exams. It was found that the students with disability avoid disclosing the impairment in

educational institutes and prefer to study in an environment that allows them and empowers them to compete with other students on an equal basis.

Another major problem that visually impaired students encountered was access to course material. The students with impairment could not access the course material as other students. Kugler & Andrews (1996) had similar findings that the student with visual impairment were disadvantaged in a system where their access to course materials was restricted. Findings reveal that in the extant system it was virtually impossible in most cases for visually impaired university students to even read their textbooks. Therefore, visually impaired students are inherently disadvantaged to compete with other students at the university level. This provides a living example of the argument made in the introduction that improper or lax implementation of inclusive education in institutions of higher learning can actually increase the vulnerability of disabled students. However, analysis revealed that students acknowledged that the technology has made it easier to access course materials. Similarly, Hasselbring & Glaser (2000) found that computer technology facilitated the students with visual impairment in inclusive education system. However, in the case of Pakistan access to technology is limited and both university students and staff are not trained to optimize the utility of available assistive technologies.

Other major problems for visually impaired students that emerged from these data include access, allotment of hostel accommodations, mobility within university and the hostel compound and financial assistance. One of the most important findings of this study is the importance of a social network for visually impaired students. The respondents pointed out they had strong social networks within the university and did not feel socially isolated. This finding contradicts prior research which shows that students with disabilities felt lonely and socially isolated **Invalid source specified**. In fact, the social networks of the visually impaired university students emerged as a means of surviving university life. In an environment where the system did not provide social, academic and social support to students to compete with other students in an inclusive system, disabled students relied heavily on social networks to cope with the daily demands of university life. Although, social integration is important in making the university education inclusive, reliance of informal social networks for

coping with university life violates the basic idea of imbuing and encouraging self-reliance among disabled students through inclusive education.

5. CONCLUSION

Inclusive Education tries to remove all barriers to effective learning. It also encourages equal participation of all students who are at risk of segregation and marginalization. This approach is framed to facilitate success in learning for all kinds of students. Inclusion also addresses the goals to diminish and overcome segregation from education at primary and other levels of education which is a basic human right. Inclusion strives for enhancement of accessibility, participation and successful learning for all” (UNESCO, 2000).

Inclusivity and Mobility goes hand in hand. The visually impaired students need to be integrated in the educational processes, systems and structures. The study reveals that inclusive education is only useful when their implementation is complete; otherwise the notion of ‘inclusivity’ goes into decadence. Based on this research, it is recommended that future research should build indigenous knowledge that can be used to inform holistic education policies backed by proper implementation to make Pakistani universities inclusive for disabled students. The desire is for simplified unification of disabled (visually impaired) to enhance student-centered learning experience.

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SPECIAL CHILDREN AND THEIR ‘SPECIAL’ PARENTS: THE CASE OF DOWN’S SYNDROME CHILDREN

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ABSTRACT

The special children, compared with normal children, whether physically or intellectually or for both ways of disability, have to pass a different life than the normal children do. Life of special children is full of issues the gravity of which is known to and experienced particularly by the parents and their siblings while their carers also realize the severity of their agonizing concerns. This article is an attempt to explore the (so-far considerably unaware) society for the multiple social issues faced by the parents and siblings of the special children. In this context the issues of Down’s Syndrome children will be discussed. The author also describes his personal experience with his Down’s Syndrome child which has encouraged to note down an account of the issues of the immediate families and carers of the special children because lack of education keeps a very large segment of the Pakistani society unconscious about the severe problems affecting the social life of the families having special children. The article will also take up the role of the government in providing comfort to these special children and their families.

Key words: Down’s Syndrome, Siblings Social Life.

INTRODUCTION

This article is authored with the view to develop awareness about a number of grave problems that the children with intellectual disability (ID), their parents and siblings suffer. These teasing problems usually go unnoticed by the masses, even by close relatives of these families. The social values and cultural norms can be claimed to be attributive to these issues. The paper is limited to the Down's Syndrome children (and adults) only, of which the author has two-decade long close personal experience with his son who is a Down's Syndrome young-man now. The author will describe the issue in the social perspective instead of looking at the issue from a medical angle, which is not author's area of study. The issue discussed is a serious concern of a number of parents and families having children with intellectual disability in Pakistan who suffer severe physical and psychological challenges in their life every day, every moment. This article is authored with the hope that it could prove a spark for attracting attention of the concerned authorities and organizations to a highly ignored sort of people – parents and families with special (ID) children.

How 'Other People' behave?

For several years a number of institutions for the rehabilitation of mentally retarded children have been functioning with focus, to whatever degree, on these children. Although the attention needed for these special children appears quite insufficient particularly for the obvious reason that the masses in Pakistan are generally inadequately educated and the standards and modes of their education is also fixated much more on making their earnings than understanding the human behaviors and manners of social life. A major part of the responsibility of this lapse rests on the leadership of the country whose priorities and planning have not generally included the development and promotion of education sector in the country.

In this article I would attempt to expose some severe hardships and agonizing challenges of parents of special children. With an experience of more than twenty years of fathering a special (Down's Syndrome) child I want to say that the society needs to treat the parents of special children as special parents, and similarly the siblings of special children also need special encouragement and moral support from the society because these siblings also face several challenges at home and outside for having a special brother or sister. However, it is clear that this desire of social awareness will remain a dream until through proper and sufficient

education the society on the whole becomes conscious of human behavior and, more importantly, of social values which rest at the deepest levels of decline at present. Despite this unpleasant reality, it will be unjust to overrule that there are some people whose positive attitude and moral support is a source of great encouragement for the suffering special parents.

At government level (federal and provincial) some measures have been taken to facilitate these children. However, acute need is felt to publicize through media the conveniences and facilities offered to them because most of the parents are hardly aware about the facilities or benefits their special children are offered by the government, for example, in terms of discounts in travel, exemption of fee for entry in amusement parks etc. The Ministry of Social Welfare both at provincial and federal levels must prepare a database of special children in the areas under their control and authority. This will be of great support for the purpose of research as well as for planning and designing appropriate welfare and rehabilitation programs for these children.

Problems of Parents and Siblings of Children with ID

As for the suffering parents, whose social life squeezes to various social constraints as they avoid taking their special children out in the public not at all necessarily due to any complex or feeling of indignity, but in order to keep other people from any possible disturbance, embarrassment or nuisance that the innocent special child may cause by his/her attitude. Depending on the degree of severity of the mental retardation, a special child may suddenly start screaming, shouting, laughing or crying in response to which the special parents are likely to take the child away from the gatherings so that others do not suffer because of this situation.

In curricula of all the institutions of primary up to secondary levels of education, a brief account appears appropriate to be included introducing special children, their hardships and problems so that sympathy and sense of care about special children may be developed in the minds of all the normal children who otherwise may find it too hard to understand or realize the issues special children and their families have to face. This obviously minor aspect can prove a source of a large-scale change in the direction of improving the attitude and behavior of people towards special people.

Mirza, I., Tareen, A., Davidson, L.L. & Rahman, A. (2009) find that ‘there is a significant stigma associated with ID resulting in decreased opportunity for these children and families to participate in community activities and high levels of stress in careers. They also explore that there is a lack of recognition and knowledge of basic management of such disorders at the primary care level. There was limited information or knowledge in relation to developmental disorders available, not only for carers but also for healthcare providers. The parents’ main concern was that the child should be able to learn basic self-care as they were worried about the child’s future after the parents passed away. This is because there is no existing system of care developed by the local or federal government.

A child with intellectual disabilities is likely to carry emotional and behavioral issues which may resist the growth and progress of the child. In a society like that of Pakistan where even the standards of general education are not fairly-established, situation of the special education and, in turn, special children, is too hard to be ruled out in terms of negligence and social discrimination. As an outcome of this scenario, it is often the parents and carers of intellectually disabled children who are to confront odd circumstances. One should not be surprised to see such parents becoming victims of frustration, anxiety and uncertainty about the future of their special children. To great extent, if not equally, influenced are the siblings of intellectually disabled children because these siblings from their early stage of life have to adjust to the home environment shaded (to be true) by the sufferings of their special brother or sister. Depending on their society and social values these siblings usually feel stigma when their ID brother or sister acts ‘differently’ in comparison to ‘normal’ children in presence of a group or gathering of relatives or other people. From psychological point of view this aspect must not escape consideration. It is a bitter fact that social problems are faced by parents of special children not only in the under-developed but also in the developed countries. Sometimes attitude and behavior of other people disheartens these parents who already carry life-long challenges in the form of their special children.

Challenges of the Children with ID, and the Society

Attention afforded to children with special needs is usually taken as an activity worth appreciation but it may be seen from a different angle as

well. Heward (2003) describes that a woman considered special care being given to a special needs child as a waste because in her view the resources and money being consumed on the child with disability could be more productive if spent on her son who did not have intellectual disability. This approach can obviously develop fears in the minds of the parents of children with ID who probably expect maximum possible facilitation for their special kids from the institutions.

In an article 'The biggest problem for parents of a child with special needs? Other people' published in *The Guardian*, Joana Moorhead describes unpleasant experiences of parents having special children when they deal with other people. Jane McCready (describing such parental issue says that her ten year old Johnny has severe autism and learning disabilities. "He looks like any other child, but he behaves oddly – for example, he might sit there banging two toys together – and he sometimes makes strange noises." Especially when he was younger, he might have a massive meltdown – at the supermarket checkout, for instance. "I'd feel 300 pairs of eyes on us – all watching us, all judging us for being disruptive and difficult," says Jane. Perhaps the worst day was when, at the swimming pool, another mother pulled her child away from Johnny "as though he had something catching". This, she says, is what you are up against when you have a child with special needs: other people tend not to be very kind which is particularly awful "because you've already got so much on your plate as it is. When people offer an odd behavior toward her child, she feels that it is like 'sour destroying'. She adds: "It's so bad, so hard to deal with, that I have friends with special needs kids who don't even take them out any more." Perhaps these two words are enough to describe the agony of the parents of special children who come across unpleasant, rather uncivilized, attitude from people. *Mumsnet*, one of the UK's largest websites for parents, offers brands the chance to influence women via high-profile sponsored discussions and other forms of interaction. Justine Roberts the co-founder of Mumsnet says, "The truth is that it's incredibly tough to have a child with a special need such as ADHD or autism. In many cases, it's a 24/7 job and to have to suffer the prejudices of others on top of that is just too much. There's a strong feeling on Mumsnet that how we look after our most vulnerable says a lot about our society and you don't get much more vulnerable than children with special needs. So we need to up our act a bit, as a society."

Parenting a Special Child

In the case of the author, on learning about from the doctor, the second day after his first child opened his eyes in this world in 1993, that the child would not be 'as bright as other kids', the author's intuition pointed to something much more than what the doctor had told. So he abruptly asked the doctor to be straight about the state of the child. It was then disclosed that the child had the symptoms of a (then called) mongoloid child. The slanted eyes, curved little fingers of hands, flat feet with unusual gap between the thumb and the adjacent finger of both the feet left no doubt in believing that the child was hard to be included in the category of normalcy. A few days later the chromosomal test confirmed the kid to be a case of Trisomy 21 which in simple terms refers to a disorder in the arrangement of the pairs of chromosomes of the child, bringing him/her into the category of Down's Syndrome children (earlier called Mongoloid kids – the terminology used for the reason that they resembled the people of Mongolia whose have got upward slanted eyes). The author was not particularly shocked at this report because the nature had prepared him well before even his wedding when he had made an unusual selection of a book written on the life of Christopher Joseph Burke (famous as Chris Burke), a Down's syndrome person (now 50 years of age) whose potentials were so amazing that he turned out to be an actor in a Hollywood movie and a folk singer. The book was about Christopher's life with a detailed account of the innumerable challenges his parents had faced all through his childhood and boyhood. The selection of this book for reading was quite uncommon but a kind of a pre-emption for the author who, as it turned out later, recalled after birth of his special child that the nature through reading of the life of Christopher Burke had prepared him for patiently accepting a special child in the near future. For Christopher Burke there were a number of public and private sector institutions to come forward for the support because he was born in the United States of America. In Karachi, Pakistan, when the special son of the author took his first breath was a very different and challenging place for special children. Now a perpetual trial of the special child, his parents, and later, of his siblings started. Without a word of complaint, the parents were determined to confront this trial with all strength and courage.

One of the most prominent impacts of the intellectual disability of a child in a family is that outgoings of the family are considerably reduced. A family with an ID child usually avoids attending family functions and

similar gatherings for the fear that their innocent ID child might raise an awkward situation by his/her activity like becoming hyper in activity or emotion. The author has often experienced that his special child insists to visit a particular relative family and when he is taken there after about an hour's travel, the special child only a few minutes later starts pushing to return home. With this position the poor parents and siblings who need to relax for some time after the journey, are fixed in an irritating position. Many children who additionally suffer the issues of hearing, speech and vision add not only to the problems of these children but also aggravate the tensions and physical challenges among their parents and siblings.

Then there are other more serious challenges when trials for parents become more complex and tougher. For example, at the age of 15 years the Down's syndrome child of the author had to undergo a surgery for removal of thyroid glands (thyroidectomy). Early days after the surgery were really tough for the child, which caused much worries to the parents who would feel the pain and suffering of their ID child who would at times attempt to remove the dressing from the stitched neck. A similar situation emerged when early in this year (2015) one of the eyelids of this special child was stitched and the bandage had to be removed because the child did not tolerate the eye covered with bandage. The author's child is also highly allergic to medical instruments and machines. For example, he is too fearful of being asked to stand for a few seconds before an X-ray machine. Recently on chest complaint he was taken to a hospital where he did not lie down on the patient's bed to allow an ECG (Electro Cardio Graph) test.

Significant Pragmatic Issues of the Children with ID

Difficulties arise before parents also at times when their ID child suffers speech issues. An ID child with speech difficulties feels it hard to explain what (s)he wants to say, and the same challenge embarrasses the parents who sometimes despite much efforts are unable to make out what their child is asking for or wants to tell them. Such situation turns chaotic when frustration starts developing in the ID child and resultantly in parents, too. The mention of these issues is quite simple but experiencing these situations and conditions is really tough.

There are other challenges, for example, concerning the feeding of special children. Author's son is 21 years of age now. For some years he has lost

interest in fruits. Keeping in view the reality that fruits provide important vitamins and nutrients to human body, refusal by the child to take fruits worries the parents concerning his health fitness. One very highly important responsibility and a tough challenge is that parents of special children have to take extra ordinary care of these children throughout their life because many of such children even having grown to adolescence are not able to understand that if they go away from their home, they may be lost and they may not find the way back to their homes. This issue arises because of the disability of these children in recognizing locations of their homes. The more threatening factor is the fear that these children may run into the hands of criminals. We do not know how many of the handicapped children on streets are those abducted from different corners of the country. This grave issue is a societal one and needs large-scale awareness in the society. Dealing with special children is a 24/7 responsibility keeping the parents and siblings engaged, and sacrificing several of their social and recuperation activities. Attitude of the society towards their special children – their vulnerable segment – is reflective of what it thinks and how it cares about the latter.

To the extent of the institutions for special children in the mega city of Karachi it is not hard to claim that only once or twice a year these institutions hold some sort of results distribution or entertainment programs for the children where they invite the parents. But reality stands that no programs are in the knowledge of the author that take into account issues and challenges of the ID children's parents and families. There is acute need to arrange awareness and training courses for the parents of the ID children so that they could explore some convenience in dealing with their suffering kids. For this sort of programs these parents should be facilitated with special leave from their places of work (public or private sector). In fact with lesser challenges to deal with their ID kids, these parents will be performing better not only with these children but also at their respective workplaces to improve their output for their respective employers as well. Programs relating to these issues should be organized for the awareness of general masses as well so that they could better understand the complexities of the immediate families of the ID children suffering from mild to moderate to severe autism and other physical and intellectual challenges. Verbal difficulties of the ID children cause much problems for these children in expressing their wants and problems. The dealing parents or siblings have to make efforts to understand what these

ID children want to have or say. This in reality is nothing simple: it is quite tricky. These parents and siblings are dealing with issues what most of other people do not have even a clue about.

For example, the 21-year old ID child of this author is largely irritated when someone gazes at him. He reacts by screaming at the person or the child gazing at him. This creates quite a scene as several other people also turn their eyes to 'see' what happened. It is very preferable that other people treat and engage with the ID children the same way as they would engage with other children. There is another issue as to what terms and words other people use for the ID children. The words like 'mad', 'mentally retarded', 'mentally disabled' or simply 'disabled' hurt the families of these children. 'Special', 'Gifted' or 'Privileged' appear quite reasonable and light words for the ID kids. Presumably these words do not hurt the sentiments of the families of these children. This is a very minor aspect of attitude but it has deeply impacts the minds of the suffering families. In the year 2013 there were about 77,000 children with disabilities in the United Kingdom. Awareness and education of parents of special children is very important because early diagnosis of psychiatric disorders in children with intellectual disabilities leads to early treatment. Medications can be helpful as one part of overall treatment and management of children with intellectual disabilities. Parents obviously need to devote much more time to their ID children who suffer speech difficulties. At several occasions the parents are unable to make out what their child desires. This situation contributes to unrest and frustration in these children. Challenges for parents grow as their special children grow up on and step into adolescence. It is just inexplicable how troubled are the parents and siblings of these special adult children are females. Their mothers confront more difficulties than the fathers although their worries are no less. In several cases it is observed that children with ID would appear undressed before their family members or relatives. On such occasions the parents wish that all others would understand and realize the incapability of these children to make out that covering the private parts of body is essential. The ID children with speech inability remain from expressing their pains and any disorders going on within their bodies. What is visible is hard but what is invisible and untold is too agonizing for the parents and the suffering kid.

Exigency of Support from Government

Parents of special children suffer much more when they are caught up in financial hardships, which is outcome of widespread poverty in Pakistan. Institutions for the training (of whatever standard) are mostly running on private basis, and very unfortunately, largely with commercial approach instead of social welfare mindset. This keeps a large number of ID children from getting the opportunity to ever getting admitted in such institutions where they had chance to improve otherwise. The government is obliged to take the responsibility to help the parents and families of the special children by way of ensuring that these children are comprehensively examined and evaluated for their strengths and needs. This evaluation might require more than one professional. Convenient and affordable facilities of periodical general medical tests, tests for psychology, psychiatry, special education, speech, vision and hearing and physical therapy need to be made available to the children with ID or other disabilities.

Looking into the underdeveloped countries like Pakistan these ‘excellent and comprehensive’ services stay a dream, and how long this dream remains from coming true is not known. Services are rather a much premature question than considering the fact that children with ID are given appropriate place in the society. The way ‘normal’ citizens are treated is clearly indicative of the concept of the government and the masses about the special, the privileged children. Some weeks back in Lahore, several blind ‘protesters’ were manhandled by the police. Although the media highlighted this inhuman and incivility exhibited on part of the government officials, yet on the whole there was no adequate hue and cry. Perhaps this is one of the attitudes of the society and the rulers towards the people with disabilities. The gravity of inconsideration at this inhuman incident is too hard to describe.

Need of Public Awareness Programs

The World Down’s Syndrome Day falls on March 21. Programs by institutions dealing with Down’s Syndrome children organize programs which appear to be focused on entertaining these children. This aspect is also very important. However, the author is of the opinion that this special day can be used effectively and purposefully when programs organized on this special occasion can engage general public. Electronic media on such occasions are in a very influential position to perform this great service by

educating the masses about the importance of these social issues. Many people, especially out of their illiteracy, consider the Down's Syndrome children as 'mad' – most possibly they learn this from their parents and elders. Many people think as if these special children carry some sort of contagious disease. Many of the children and even their parents and passers-by gaze at the special children when they come across each other. They give these special children a strange look. Many a time children laugh at the special children. This public attitude is indicative of a huge capacity of creating awareness and consciousness about special children in the society. A brief account about special children can be included in the syllabi at various levels in schools and college level courses (for Conclusion). Note: Parents of the special children are to be encouraged in the conclusion part of this article! This will definitely develop a good understanding in the minds of the masses, ultimately improving their feelings, attitude and behavior toward the special people. This, in turn, will provide the families of the special children with much relief, and reduce their mental stress.

Meeting the Challenges

There are phases of recognizing, diagnosing and treating intellectual disability which usually follow medical, mental health and behavioral issues to the children with ID and related challenges for their parents and caregivers. Harris (2010) describes the understanding of children with ID in the present (developed) society in these words, '...stigma no longer holds the sway it once did for individuals with intellectual disability. They have now a presumed right to excellent, comprehensive services throughout their lives, and parents and other caregivers can play a crucial role in ensuring that such services are provided.'

Effective assessment and intervention programs needs to be designed as these programs can prove great help to the children with intellectual disability and their families in managing and overcoming the challenges of intellectual disability. On having come to learn that their child is Down's syndrome, parents certainly get worried about multiple questions concerning the physical and mental growth of the child, the way that child is going to live his/her life, the way other people including their close relatives are going to react because Down's syndrome is intellectual disability which is largely a concern of social and environmental aspects of life of the ID child and the family. The role of the first doctor, who

could be a pediatrician, can place enormous impact on the conception of the parents who recently have a child with ID. A few words of encouragement and a decent and realistic advice to parents can prepare them for the forthcoming challenges of life – theirs and of their child.

In developed countries of the world there are school counselors for special children to address their unique issues. According to Lockhart (2003) the role of the school counselors is increasingly valuable in the education of students with special needs. These counselors have frequent opportunities to interact with the parents of these children. Taub (2006) suggests that not only the special children have their variety of special needs but the issues, backgrounds and concerns of their parents are also not the same. This means that there is no single technique to handle the issues of the children with intellectual disabilities and of their parents, rather different methods and approaches need to be explored and applied to resolve the concerns of the two.

The Japanese government has taken measures to develop a system of special education to facilitate the people with intellectual disabilities (IDs). Steps were taken to educate the youth at school level about the people with ID following a survey by the Special Olympics organization which released its findings in 2003 and revealed that in entire Japan negative attitudes from public towards the people with ID were experienced¹. The Japanese government wisely decided to educate the youth to overcome this weak point of the society. This is a matter of social value being developed through changing the mindset of people, through change in their cultural norm and behavior.

CONCLUSION

The level of difference of technological advancement and progress between the developed and the developing countries of the world generally places an equal impact on the social values of the said two groups of nations the same way as the difference between the two in terms of technological advancement. The more educated are more knowledgeable and, consequently, better in the sense of civility, attitudes, human considerations and values. It is these values, based on knowledge and education, and the human considerations that develop a sense of civility amongst the citizens in a state. The stronger the values, the better will be the exhibition of behaviors and attitudes. On the contrary, poor

values reflect a poor society – poor in outlook, poor in civility, poor in behavior and attitudes. This clearly refers that for the purpose of introducing a decent environment for normal as well as special people in a society, the behavior and attitude of the masses must be sympathetic and affectionate. The cultural values significantly influence the trends of the masses. Universal truths do always sustain but the conceptions, understanding of values and norms, in other words, the cultures do always need review to suit the demands of the changing times. If parents of special children have remained ignored in Pakistan so far, then there is dire necessity for the public authorities in particular and the society in general to give a serious thought to this important issue.

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PHYSICAL AND PROFESSIONAL FACILITIES FOR STUDENTS WITH SPECIAL NEEDS IN GOVERNMENT SPECIAL EDUCATION CENTERS IN PUNJAB, PAKISTAN

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ABSTRACT

The main purpose of this quantitative study was to identify physical and professional facilities available in Government Special Education Centers in the Punjab province to meet the special educational needs of students with disabilities. The population of study included all the heads of Government Special Education Centers in Punjab. A self-developed questionnaire comprising 36 statements was used to collect data from a sample of nineteen (19) heads of Government Special Education Centers working in Gujranwala Division of the Punjab. The reliability of the validated instrument was .845 (Cronbach Alpha). Frequencies were calculated and tables were drawn to present the results. Major findings of the study exhibited that most of the Government Special Education Centers were lacking in the physical facilities of play grounds, ramps, library, multimedia projectors, large print devices and their own buildings. These centers were also deficient in professional facilities of mobility and vocational training instructors, speech therapists, physical education instructors and qualified teachers. Conclusions were drawn and recommendations to Punjab Special Education Department were given in the light of major findings.

Key words: Physical facilities, Professional facilities, Students with special needs, Govt. Special Education Centers.

1. INTRODUCTION

Disability is prevalent over the globe irrespective of geographical boundaries, social disparities, sex or socio economic status (Farooq, 2012). National Census (1998) reports, that the population with disability in Pakistan was 2.49% of the total population. Total number of PWDs (persons with disabilities) was 3,286,630 and the highest proportion (55.6%) of PWDs was residing in Punjab, Pakistan. The incidence of disability rate of PWDs per 100 population was (24.8) in Punjab. The male female ratio in Punjab was 59:41. 28% of the total persons with disabilities, 10 years old and above were educated which was less than the percentage among the total population (Hameed, 2003).

Persons with disabilities are protected by all cultured nations in terms of their rehabilitation, education, medical services, employment, and a number of support services. The year 1981 was acknowledged as the year of persons with disabilities which has played a significant role in creating awareness among masses regarding needs, issues, challenges, and future considerations for special persons. In connection with this international initiative, Government of Pakistan took bold steps in the form of establishing ministries, organizations, and formulating policies and plans of action for the welfare of persons with disabilities (Farooq, 2012).

Policy development process was initiated in 1985 in special education for its sustainability. It resulted in the approval of first National Policy for Persons with Disabilities in 2002. A National Plan of Action (NPA) was presented in 2006 for the real implementation of this national policy. The policy presents an extensive range of services including education, medical facilities, vocational training and rehabilitation, assessment and early intervention, employment, advocacy, research and development, provision of funds, designing parks, buildings, and other public places to meet the special needs of persons with disabilities. On the basis of this policy, Federal Government of Pakistan guided provincial governments to take steps to meet the special educational needs of children with disabilities. To follow the suit, special education departments were established in all provinces of Pakistan. In Punjab, special education centers were established in 90 Tehsils in 2006 where children with hearing impairment, visual impairment, physical disabilities, and mental retardation were accommodated (Farooq, 2012).

Schools for special needs students require special facilities including buildings, paths, toilets, equipments, teaching aids etc. Many schools for children with disabilities are deficient in essential facilities and services. Children with special needs are more vulnerable to environmental health hazards because their physical growth is under process; they breathe, eat, and drink more per pound of body weight than adults; and they find it difficult to protect themselves from hazards (U.S.EPA, 2001).

Barnett (2007) has presented some of the important points to meet the special educational needs of students in schools. These include proper lighting, air quality, heat or humidity, specific environmental standards in acoustics, health care and environmental protection needs to be included into school building construction guidelines etc. Wheel chair users do not face problems in attending schools if architectural barriers are removed (Dash, 2006). Children with deafness can be benefitted acoustically by providing them with hearing aids and other assistive devices (Sharma, Kausal & Mahapatra, 2007). The use of audio visual aids in teaching to children with deafness is highly desirable. As these students require visual assistance, the students with visual impairment need audio assistance to get familiarized with concepts (Dong, 2010). Keeping in view the importance of special facilities for children with special needs, the present study was conducted to achieve the following objectives:

1. To identify physical facilities available to students with special needs in Government Special Education Centres of the Punjab province.
2. To identify professional facilities being provided to children with special needs in Government Special Education Centres of the Punjab province.
3. To give recommendations about the provision of lacking facilities in these centers.

2. METHODOLOGY

Methodology of the study can be discussed under the following headings:

2.1 Population

According to geographical and administrative division, Pakistan consists of five provinces: Punjab, Sind, Baluchistan, Khyber Pakhtoon Kha (KPK), Gilgit/ Baltistan. Out of these five provinces, Punjab is the largest one. The population of study consisted of all 90 principals of Government

Special Education Centers working in the Punjab province. Due to constraints of time and resources, only one division (containing 19 tehsils) out of 9 divisions (Lahore, Gujranwala, Multan, Dera Ghazi Khan, Sargodha, Rawalpindi, Bahawalpur, Faisalabad, Sahiwal) was selected through simple random sampling. Sample of study comprised 19 principals of Government Special Education centers functioning in Gujranwala Division of the Punjab Province. A self developed questionnaire consisting of two parts (one having 23 questions for physical facilities and the other having 12 questions to identify professional facilities) was administered to elicit responses from the participants of the study. The respondents had to respond against two point criteria (Yes & No). The questionnaire was validated by experts of special education field. The reliability of the instrument was .845 (Cronbach Alpha). Frequencies were run to see the percentage of available physical and professional facilities.

2.2 Data Collection Procedure

First of all, telephone numbers of all nineteen principals of these Government Special Education Centres were obtained from Directorate of Special Education Punjab, Lahore. The principals were contacted by the researchers. They were informed about the purpose of data collection. They were also assured that information gathered from them will be utilized for research purpose only. They were also guaranteed that confidentiality and anonymity will also be observed. Questionnaires were sent to them through electronic mail and postal service. The return rate was 100%.

Data were collected from the principals of following nineteen Government Special Education Centers of Gujranwala Division:

1. Govt. Special Education Center Shakar Garh
2. Govt. Special Education Center Sambrial
3. Govt. Special Education Center Kheyali Shahpur Town
4. Govt. Special Education Center Wazir abad
5. Govt. Special Education Center Noshehra Virkan
6. Govt. Special Education Center Qila Dedar Singh
7. Govt. Special Education Center Kamonke
8. Govt. Special Education Center Pasroor
9. Govt. Special Education Center Daska
10. Govt. Special Education Center Khariyan

11. Govt. Special Education Center Malikwal, Mandi Bahauddin
12. Govt. Special Education Center Phalia, Mandi Bahauddin
13. Govt. Special Education Center hafizabad
14. Govt. Special Education Center Pindi Bhattian
15. Govt. Special Education Center Sra-e- Alamgir
16. Govt. Special Education Center Narowal
17. Govt. Special Education Center Aroop Town
18. Govt. Special Education Center Zafarwal
19. Govt. Special Education Center Narowal

3. RESULTS

The researchers identified physical and professional facilities available in Government Special Education Centers. Findings are presented in tabulated form. Table: 01 is presenting the types of disabilities being served in these centers.

Table 1
Types of Disabilities being catered in Government Special Education Centers

Serial No.	Disability
1	Mental retardation
2	Hearing impairment
3	Visual impairment
4	Physical disabilities

Table 2
Availability of Physical Facilities

Serial No.	Physical Facilities	Frequency	Percentage
1	Fans	18	94.7
2	Drinking water	19	100
3	Electric water coolers	14	73.7
4	Play ground	7	36.8

5	Ramps	3	15.8
6	Specially constructed stairs	15	78.9
7	Toilets	18	94.7
8	Library	5	26.3
9	Furniture	19	100
10	Audio players	6	31.6
11	Large print devices	1	5.3
12	Magnifiers	3	15.8
13	Slide projectors	1	5.3
14	Film projectors	1	5.3
15	Multimedia projectors	2	10.5
16	Tape recorder	10	52.6
17	Loud speaker	19	100
18	Charts	19	100
19	Television	14	73.7
20	Radios	19	100
21	Transports	18	94.7
22	Hearing Aids	8	42.1
23	Own building	4	21.1

Table 02 shows the responses of heads of special education centers in Gujranwala division about facilities and services available in their centers for disabled children. Heads of special education centers reported 100 % availability of fans in the classrooms of the children with disabilities. Heads of 18 schools (94.7 %) reported about the availability of clean water to drink. Electric water coolers were available in 73.3 % centers. Only seven (36.8%) centers had playgrounds for children with disabilities. There were only 3 schools out of 19 (15.8 %) which had ramps for children with disabilities whereas 15 out of 19 (78.9 %) had specially

constructed stairs. Eighteen centers (94.7 %) had toilets constructed according to the special needs of children with disabilities. Only 5 out of 19 centers (26.3 %) had facility of library while only in six (31.6 %) centers audio players were available for children with disabilities.

All of the heads reported about the availability of proper furniture i.e. desks, tables and chairs for disabled children in all centers. For children with low vision large print devices were available in only one center (5.3 %) whereas magnifiers were available in three (15.8 %) centers. Only in one (5.3 %) center slide and film projectors were available while multimedia projectors were available in two (10.5 %) centers. When the heads were asked about the availability of TV, 14 out of 19 principals (73.7 %) replied in affirmation. Tape recorders were available in 10 centers (52.6 %). All heads told that loud speakers, charts and radios for teaching to children with disabilities were available in their centers. Talking about the availability of transport for providing pick & drop service to children with disabilities, 18 (94.7 %) heads reported that their centers had their own transport. Eight heads (42.1 %) of these centers told that their centers had hearing aids for children with hearing impairment. Only four (21.1 %) out of nineteen centers had their own building.

Table 3
Availability of Professional Facilities

Serial No.	Professional Facilities	Frequency	Percentage
1	Physical education teacher	5	26.3
2	Maid to take children to toilet	15	78.9
3	Study and recreational tours	17	89.5
4	Speech therapist	5	26.3
5	Audiologist	00	00
6	Nurse	00	00
7	Medical officer	00	00
8	Psychologist	16	84.2

9	Vocational training instructor	1	5.3
10	Psychologist	16	84.2
11	Qualified teachers	6	31.6
12	Mobility instructor	1	5.3

Table 03 shows the responses of heads of centers for special children regarding availability of professional facilities. According to the results 5 out of 19 centers (26.3 %) had professional service of physical education teacher to guide disabled children in play ground. Seventeen heads of these centers reported that their centers (78.9) had facility of maid to take children to toilet. A large number of heads of centers (89.5 %) told that service of study and recreational tours was arranged in their centers. According to the heads in only five centers (26.3 %) speech therapists were available. Services of audiologist, nurse, medical officer and psychologists were not available in all nineteen (100 %) centers. Only one center (5.3 %) out of nineteen had vocational training instructor. According to sixteen heads (84.2 %) their centers had psychologists. Professional service of qualified teachers was available in six (31.6 %) centers and only one out of nineteen centers (5.3 %) had the service of mobility instructor for children with disabilities.

4. DISCUSSION

The present study identified availability of physical and professional facilities in Government Special Education Centers in Punjab province. It was found that only 4 centers out of 19 (21%) possessed their own buildings. In other words, remaining 15 centers (79%) were being run in rented buildings which were without ramps and playgrounds. Children of four type of disabilities having diversified needs could not be accommodated in such type of non disability friendly buildings. Additionally, the study reflected lack of large print devices (5.3%) and magnifiers (16%) in centers which are necessary for children with low vision in learning. Their absence must be causing great hurdle in teaching learning process. It finds support from a study conducted by Fatima, Akhter, Malik, Safder, Nayab (2013) who found that students with low vision were facing great difficulty in education due to the absence of assistive devices. The study also reported that hearing aids were being

provided to children with hearing impairment in only 8 (42%) centres. It means that 11 (58%) centres were not providing hearing aids to children with hearing impairment which must be having negative effects on the speech and language development of children. The absence of speech therapists in 14 (74%) centres and audiologists in all centers must be aggravating the situation as has been reported by Sharma, Kausal, & Mahapatra (2007) that children with hearing impairment could take advantage of acoustics with the help of hearing aids and other assistive devices. It is surprising to note that there were only 6 (31.5%) centers where qualified teachers were appointed. It was posing hindrance in the way of teaching learning process.

5. CONCLUSION

In the light of responses of heads of Government Special Education Centers in Gujranwala Division about availability of physical and professional facilities in their centers, it is concluded that most of the centers, included in survey, had provision of basic needs, i.e. fans, drinking water, electricity, toilet and furniture. According to these results only seven (36.8%) centers were having playgrounds for children with disabilities, as physical activities are one of the most important factors of physical and intellectual development of children. It becomes more imperative for children with disabilities, so government should allocate special funds to cater this need. Data also revealed that only three centers out of nineteen had ramps for children with disabilities. Absence of ramps is a worse structural barrier for children with disabilities. So government should take urgent measures to remove this barrier. Few centers, i.e. five out of nineteen centers (26.3 %) have facility of library.

6. RECOMMENDATIONS

The following recommendations are made on the basis of major findings: A large number of special education centers are being run in rented buildings which cannot fulfill the special educational needs of children with disabilities. Therefore, it is recommended that Punjab Special Education Department should make arrangements for purposely constructed buildings for all special education centers.

- Provision of play grounds in all centers should be ensured.
- Children's library should be established in all centers.

- Large print devices and magnifiers should be made available to facilitate children with low vision.
- Punjab Special Education Department should provide slide, film and multimedia projectors to all Government Special Education Centers for teaching to children with disabilities in a better way..
- Hearing aids should be provided free of cost to all needy children with hearing impairment.

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WOMEN'S RESEARCH PRODUCTIVITY IN EDUCATIONAL PUBLICATIONS AND FACTORS INFLUENCING ACADEMIC RESEARCH IN PAKISTAN

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ABSTRACT

This study provides evidence about the status of women's studies in the public sector universities of Pakistan. As one of the central strategic aims of Higher Education Commission (HEC), since its establishment in 2003, is to advance and sustain a dynamic and internationally competitive research sector in Pakistan. The objectives of the study were firstly, to find out how many articles had been published by men and women in national and international, HEC approved and impact factor journals since the establishment of the HEC till June 2010. In addition to investigating those factors that influence women's research productivity, it aimed to explore how many of these articles were written individually and co-authored by females. For the purpose of data collection, all the Offices of Research, Innovation and Commercialization (ORIC) of public sector universities were contacted telephonically and through e-mail. Seven interviews were conducted to explore the factors influencing women's research publications. The study revealed that a significant increase was found in the number of articles authored or co-authored by female academicians from 2003 to June 2010 respectively. The interview data showed that female academicians, despite being constrained by time and hampered by a dearth of networking and mentoring facilities, as well as by extensive social responsibilities, were negotiating across these barriers to produce more research work. The study recommended that academicians with high publication yield may be rewarded with higher level positions and promotions to increase Pakistani women's prominence in scholarly journals.

Key words: Women Research, Publications, Pakistan, Productivity, Factors, Influence.

1. INTRODUCTION

Academic institutions all over the world are now recognizing the worth of research efficiency for the professional development of educationalists (Ramsden, 1994), but visible research outputs from women academics is still very low. Globally, universities are introducing more and more monitoring procedures to set research efficiency as a norm for promotions and other benefits as a measure of academic excellence, (Perry, 2005). This adds stress on females in academia because they are already engaged with many other duties. Nowadays, promotions, professional growth, ranking of academic staff and improvement are mainly based on the research publications due to the proliferation of research culture. This facilitates collaboration and networking opportunities with other researchers. In the light of the above mentioned background, this paper seeks to investigate female academic staff's research productivity specifically in Pakistani universities. In the same context, this paper is also intended to report and evaluate an increasing research efficiency of females' academics since the founding of HEC in Pakistan.

According to Schriewer (2003), universities are independent bodies, and therefore, they are free to devise any external criteria according to their own laws and rules. Therefore, with a similar notion, HEC, Pakistan was established in October 2003 as an independent institution, working directly under the chief executive of Pakistan. Prior to the establishment of HEC, the academic condition of most of universities was dismal chiefly in relation to research output as only a limited number of faculty members were engaged in active research. As a part of its efforts to upgrade research output at the university level, HEC grades universities every year by computing the number of academic research articles published in national and prestigious international academic journals and the number of citations in scholarly indexes. In the latest ranking of universities in 2010, it was noticed that overall, Pakistani universities had performed better with reference to their research production. However, there is an inequity in the male and female professional standing in Pakistani universities. There is a less percentage of the appointment of female professionals at higher academic positions, specifically on the basis of their research output. The reasons for the slow professional mobility of women include multifarious social responsibilities such as family constraints e.g. childbirth and child rearing, dealing with domestic

pressures stemming from interference on the part of the in-laws etc. In addition, lack of female mentors and facilities necessary for their amelioration in their career is also a interference in their research efficiency in the social sciences and other sciences areas (Onokala & Onah, 1998).

This literature review primarily covers various studies conducted in multiple international contexts. The relevant literature shows that globally, women display less research productivity as compared to men; however, their contribution is increasing with time as they are gaining consciousness about the significance of educational research while coping with domestic and professional responsibilities (Lee, 2005; Hall, 1999). The study about gender inequalities in relation to academic publication by Mathews and Andersen (2001) explored the inference that due to domestic duties females are not too job oriented. Lemoine (1992) also envisaged that females' involvement in higher level research is negligible (Poole, 1997) and that they are more inclined towards teaching as compared to men who are more involved in research. Pakistan's situation is also not too different therefore; female academicians prefer to attain jobs in colleges instead of full time jobs or tenure track which require extensive and active research activities and publications.

Xie & Shauman (1998) examined important gender variance in research efficiency through a longitudinal study by collecting data from post secondary faculty. They noted that gender variance in research production is declining with time, but this change is credited to structural positions, personal characteristics and marital status. Fox & Faver (2005) studied individual practices, attitudes, location, professional networks, academic position and marital statuses as prompting factors linked with research yield of male and female societal work scholars. This exploration reported a major change in the publication level because practices attitudes, family statuses and professional networks worked differently for females as compared to males.

Evans & Cokley (2008) investigated the deprived situation of African American women academicians by racial and gender discrimination. Several females were unsuccessful to get promotions due to impediments in their starting high class research activities. Race and gender linked issues are such hindrances which have direct and indirect effect on

females research efficiency. While this research is localized within an Afro-American context, it has bearings on female research productivity within the Third World scenario where women are marginalized owing to multiple socio-political factors. The study of Abramo, Angelo & Caprasecca (2009) also inferred the presence of important variances and highlighted a better performance of males in research production in their gender-oriented analysis. Though, the alterations show a propensity towards a decline in some sectors which in turn does not necessarily prove women's inferiority in research performance.

Bentley (2003) enlisted familial liabilities during nurturing years, job selection and same gender sorting for co-authors and the inability to create professional networking, as causes for less publication amongst women academicians. It is really very tough to discover same gender research partnership because university level female academicians are already few in numbers. According to Mathews & Andersen (2001), lack of official support, lack of professional linkages, time and resources desired for publications, responsibility of family and children intrude females in their professional development and research task. On the other hand, Maske, Durden & Gaynor (2003), theorized that females have to dedicate their time on other service activities at the cost of research. A female teacher spends 55% more time on household work than a male, 22% more time on teaching as compared to a male teacher and men devote 59% more time on their research than females. Dasaratha, Raghunandan, Logan & Barkman (1997) enlisted research funding, mentoring in early career stage, opportunities for cooperative research, family time, unequal contribution in teaching activities and disparities in opportunities and rewards as chief factors responsible for female low participation in the area of research.

In the view of Ashcroft, Bigger & Coates (1996) women are less eagerly sponsored by influential scholars that reduce their career goals, opportunity and networking. There are also distinguishing forms of gender-oriented academic work in different countries (Poole, 1997) which confirm that females are more inclined towards teaching than their male colleagues who are more inclined towards research. Corley & Gaughan (2005) revealed that ladies devote more time on writing funded proposals instead of working on unfunded research and feel appreciated and less satisfied less by colleagues for taking part in research. In addition, Tower & Ridgewell, (2006); Ridgewell & Tower, (2005) recognized major

factors for females' less participation at higher positions which contain less number of females PhDs, the laborious quest to maintain balance between family and work, social conditioning, institutional and structural bias and opposing value systems.

The related researches also showed diverse outcomes in exploring females' research output in terms of quantity and quality. Differences across disciplines need to be taken into account vis-a-vis research efficiency styles. Tower, Plummer & Ridgewell (2007) studied the extent of females' research productivity in the world's best academic journals and found no gender difference in terms of the percentage of women contributing in the academic work force and research efficiency. There were no main statistical variations in the number of publications in internationally recognized journals relating to all main disciplines i.e. social science, science and business. So, this reflects discipline variations in publication ratings, but no gender differences across the disciplines. Vange, Marler & Wright (2005) investigated that in research-based departments, ladies' publications are more but in less research-based departments women's publications are fewer than those of males.

Creamer (1998) also evaluated faculty publication efficiency and explored some issues such as gender wise variations, equity and race as the normal criteria for gauging the quantity and quality of research production. Recognition, reinforcement, less resources and lack of commitment in significant work might be the causes for the reduced number of productive women researches.

Moghaddam, Hasanzadeh & Ghayoori (2012) studied research output, performance and factors affecting women's research efficiency in Iran. This study explored females' research productivity as being weaker than that of males and designated some motivational factors with positive effects, such as getting intrinsic talents, promotions, societal benefits, reinforcement by friends and family, religious compunctions concerning the significance of the subject and the effort to show individual competences. Siemienska (2008) culture is another factor that discriminates behaviour and research efficiency of faculty members. Males are getting more financial support than females in their research. Abramo, Angelo & Caprasecca (2008) studied the Italian Academic System and explored significant variances in the performance distribution

between genders, a fact that parallels that of many academic environments across the world. Males demonstrated a greater average efficiency than women but not in all domains of professional positions and research disciplines. Female occurrence is truly peripheral in information, engineering and industrial but ladies' performance is not less than that of their male co-workers. The performance gap has only been documented in terms of the quantity of research papers however; this gap is less obvious in terms of quality index.

The given literature review highlights the various factors that directly and indirectly influence female research productivity in various regions of the globe. An important point that comes forward is that the investigation of research productivity on the part of Pakistani female academicians is still a relatively unexplored area. In addition, factors such the religious, geographical, social and cultural milieu of Pakistan exerts their own pressures on Pakistani female academicians. Some of these factors such as various domestic issues have been addressed by this study, however, other factors such as religious beliefs, cultural norms, global perceptions about Pakistani female academicians; gender issues etc. are further dimensions that invite scrutiny. However, this study has been delimited to analysing research output in Pakistan on the part of university level female academicians in relation to the academic conditions set in place by the HEC and does not bring the above-mentioned factors within its purview. The quantitative data provides a window into the statistical facts about female research productivity. The data collected through the interviews uses these facts to explore the factors that influence this productivity.

2. Research Methodology

The research was qualitative as well as quantitative in nature. The reason for this is that quantitative data has been used to supplement the findings of the qualitative data so that a comprehensive picture of the factors determining female research output in Pakistan may be brought to light.

2.1 Population and Sampling

In 2010, there were 76 public sector universities in Pakistan. According to HEC 2010 ranking the top seven universities in relation to research output were sampled for data collection. Following universities were included as sample of this study:

1. Quaid-e- Azam University, Islamabad

2. University of Agriculture, Faisalabad
3. University of the Punjab, Lahore
4. Government. College University, Lahore
5. University of Sargodha
6. University of Karachi
7. University of Peshawar

2.2 Research Instrument

A questionnaire was designed which addressed the total number of publications produced by the female and male faculty members each year in addition to the publications of females faculty members in W, X, Y, Z category as well as globally recognized impact factor journals. In addition, data pertaining to individual research publications by female academicians as well as those that they have co-authored was also gathered.

2.3 Data Collection

Data was collected through various sources; initially, ORIC offices in the above mentioned universities were contacted telephonically. These offices have been set up in various universities to rationalize research cooperation between the respective universities and the HEC. At the preliminary stage, the ORIC officials were given the particulars of research and requested to provide the essential information mentioned in the questionnaire. The questionnaires were mailed with the request that the data may be provided at the earliest. Overall, the response rate was 100%.

In order to investigate the factors influencing academic research of women, seven female faculty members were chosen randomly from each of the sample university to investigate the influential factors. They had been contacted by email to participate in the interviews. An explanatory account was sent to all of them including the information about the aims of research along with the assurance of secrecy. After agreement, the time was set and interviews were planned to be held in the offices of their relevant universities.

2.4 Data Analysis

The interviews were recorded, transcribed and then coded according to the developing themes. The data were then tabulated so that a clarity regarding research output from 2003-2010 on the part of the female

academia in Pakistan may be analyzed. Once the numerical data was attained, it was scrutinized to unearth the factors that resulted in the given statistics which were then explored qualitatively through interviewing various faculty members.

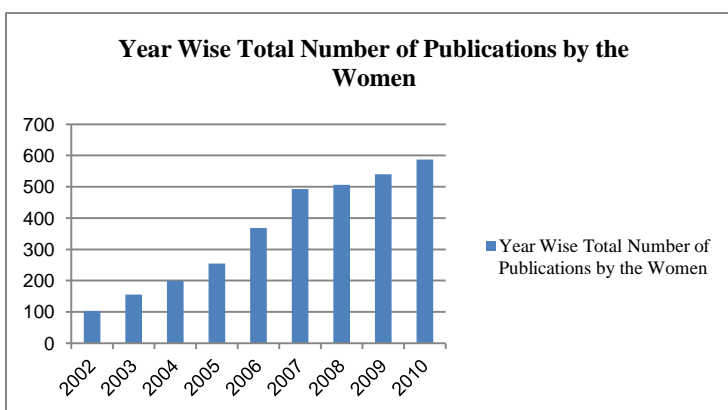
3. FINDINGS

Quantitative analysis of data presented below, showed the academic research produced by the male and female academicians working in public universities of Pakistan from 2003-2010.

Table 1
Year-Wise Total Number of Publications by the Female Faculty Members of Universities

	2003	2004	2005	2006	2007	2008	2009	2010
Total Number of Publications by the female faculty members	155	199	255	368	493	506	540	587
Total Number of Publications by the male faculty members	265	387	450	509	705	907	925	978

Figure 1: Year-Wise Total Number of Publications by the Female Faculty Members of the Universities



The data collected from the seven ORIC offices revealed that the publication rate of both the male and female faculty members has increased on an annual basis since the inception of HEC, but the publication rate of female academicians appears to be very low as

compared to men. In the year 2003, the total percentage of publications by female academicians stood at 36.9% as compared to the male academicians whose publications stood at 63.09%. In the year 2010, the percentage of female publications stood at 37.50% as compared to the males which stood at 62.49%. If a comparative analysis of the publication percentages in the years 2003 and 2010 is done, one sees that there has been a 0.6% increase in the female publications over the eight year period for which the data has been collected. This increase might be seen as nominal, however considering the fact that the male publications displayed a decrease of 0.6% in the same duration, the fact that women academicians have shown an improvement in a male dominated academic scenario bespeaks of a relatively higher degree of focus on research in their respective domains. Moreover, this increase has not been gradual. As a matter of fact, in the year 2006, female publications rose to 41.96% as compared to the 58.03% displayed by male academicians. This indicated that, based on its track record, research productivity amongst female academicians does have the potential to rise further. The factors that may supplement this rise have been presented in the latter half of this study.

Table 2
Year-Wise Total Number of Publications by the Female Faculty Members of the Universities in National vs. International Journals

	2003	2004	2005	2006	2007	2008	2009	2010
Total Number of Publications by Women in National Journals	116	101	141	188	206	243	255	296
Total Number of Publications by Women in International Journals	39	98	114	180	287	250	285	291

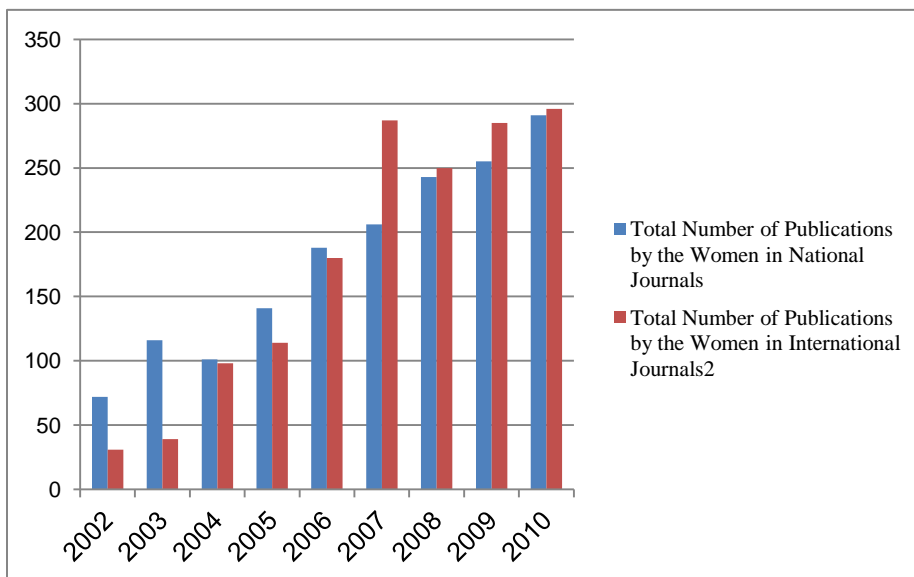
Figure 2: Publications in National vs. International Journals

Table 2 and Figure 2, show the year wise contributions to academic research by the female faculty members working in the public universities of Pakistan. These publications have appeared in both national and international journals since the inception of HEC. The data shows that in the early years from 2002-2006; female academicians chiefly published their work in national journals, whereas in the later years their contribution to international journals increased in comparison with their contributions to national journals. This is owing to a higher degree of awareness regarding the international placement and scope of their research as well as an easier access to global research through various facilities provided by the HEC.

An analysis of the data given above offers interesting results. In the year 2003, the percentage of female research papers in national journals of Pakistan stood at 74.83% whereas their research output in international research journals stood at 25.16%. In the year 2010, the percentage of female research papers in national journals displayed a decline and stood at 50.42% whereas, conversely, their research output in international journals displayed a marked increase to 48.57%. A similar increase in international research productions has been witnessed in 2007 which also indicates the openness with which research emanating from Pakistan's

female academic circles was being acknowledged on the global front. This also shows an increasing awareness amongst female academia in Pakistan to showcase their work in journals of international standing. These statistics bear witness to a higher degree of professional awareness amongst female academicians working in Pakistani universities.

Table 3
Total Number of Publications (Category-Wise) by the Female Faculty Members of the Universities

	2003	2004	2005	2006	2007	2008	2009	2010
Publications in Z Category Journals of HEC	87	114	155	138	119	115	105	90
Publications in Y Category Journals of HEC	48	51	68	172	305	313	353	397
Publications in X Category Journals of HEC	12	18	20	43	51	59	61	75
Publications in Impact Factor Journals of HEC	08	08	12	15	18	19	21	25

Figure 3: Total Number of Publications (Category-Wise) by the Female Faculty Members of the Universities

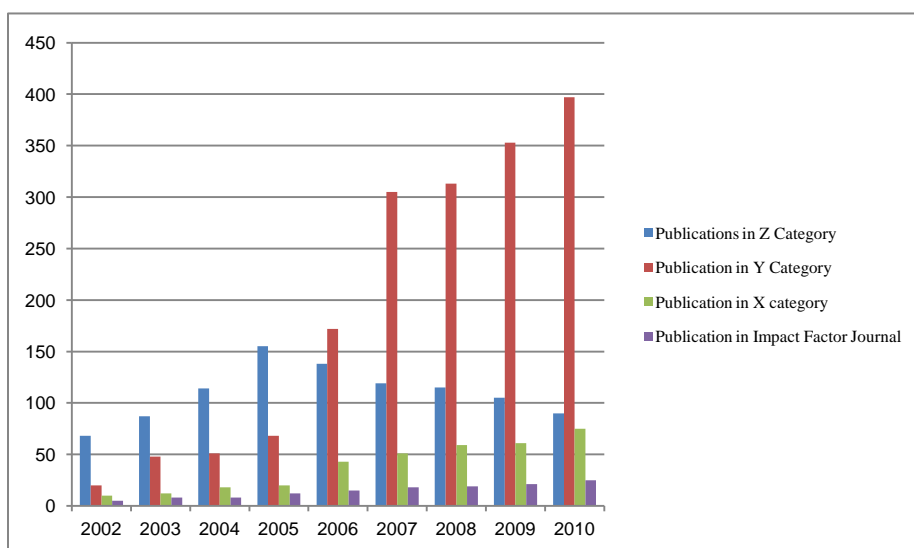


Table and Figure 3 indicate the women's research productivity in the HEC's Z, Y, X categorized journals and the journals with a specific Impact Factor. The data shows that the number of publications in "Impact Factor" Journals increased on a yearly basis from 2003-2010. However, this number of publications is very small when it is placed within the broader spectrum of total publications. The positive aspect is that the number of publications in "X" and "Y" category journals has, however, improved gradually. This displays a growing consciousness on the part of the female academia to improve the quality and standard of their research so that it can be showcased in journals of a prestigious standing, since it enhances the ranking of their respective departments and also becomes a bonus factor when it comes to professional amelioration.

A closer look at these tables offers interesting insights not merely into the research productivity of Pakistani female academicians; it also tends to touch upon some of the constraints involved in getting published in research journals that have a higher ranking. In the year 2003, the percentage of female research papers in the Z-category journals stood at 56.13% which underwent a slide over the years and came to stand at 15.33% in 2010. While this appears to be discouraging what is interesting is that over the same time span, the percentage increase in research publications of female academics displayed a monumental rise. In the Y category journals, research productivity of female academicians stood at 30.96% which rose to 67.63% in 2010.

Similarly, there is a parallel increase in the female research publications in X category journals from 7.74% in 2003 to 12.78% in 2010. This increase in both categories indicates an improvement in the quality of research production as well as of a higher degree of awareness about disseminating information in journals of a higher international standing. On the other hand, the percentage of female publications in the impact factor journals of the HEC displayed a decrease from 5.16% to 4.26%. This may be due to the fact that the criterion required for publication in journals having a monumental impact factor is more stringent

4. DISCUSSION

While the above data elucidates the research productivity from 2003-2010, it does not highlight the factors that generated these results. In order to explore those factors, interviews were conducted. The results gleaned

from the data collected from the questionnaires were used to frame the questions for the interviews. Subsequently, the data collected from the interviews was coded in the light of the following themes that emerged from the interviews:

1. Time Constraints
2. Lack of Mentoring
3. Lack of Networking and
4. Extensive Social Responsibilities

These themes are primarily the factors that leave monumental impacts on the research productivity by Pakistani female academicians. It is pertinent to note here that this study may be supplemented by further investigations in the area so that other dimensions of female research output in Pakistani universities may be brought to the limelight. The ensuing discussion has been divided into sections on the basis of the major factors that emerged out of the interviews.

4.1 Time Constraints

Majority of the participants cited a heavy teaching load as a hurdle in the accomplishment of their research-related work. One interviewee stated that, there is "Not enough time for in-depth reading and continuous periods of concentration for research,' too many constant interruptions are there." Another claimed that "Research requires maximum focus in a particular domain. Whilst teaching, one needs to extricate one's self from research and enter an entirely different intellectual domain at times. This not only slows down research productivity but becomes problematic in ensuring focus".

Many lecturers also have an on-going professional role outside the university, continuing their work as, for example, artists, health professionals, and business managers, while leading and developing courses in Higher Education. This tends to exact a greater burden on their energies. However, additional responsibilities pertaining to their tasks as teachers emerged as a major hindrance in enhancing their research output.

One observation that is pertinent in the analysis of this data is that when it comes to making time for research activities, the responses indicated a difference in the opinions of the junior teachers as well as the senior teachers. The junior teachers stated that while they were eager to do research since they were more updated in research methodologies, the

extra work load placed on them at the onset of their careers became an obstacle in their conducting research with full concentration. Moreover, being more computer savvy, they were less hesitant to utilize updated software for supplementing research activities such as data collection, unlike their senior colleagues.

Another pressure-building issue is the promotion criterion set by the HEC. The interviewees seemed anxious about meeting the demands of the promotion system set by HEC which compels them to produce research at all costs. The premise behind this pressure is to inculcate constructive research habits amongst faculty members; it has also generated a rate race amongst them to get published at all costs. While research quality has suffered due to this factor, it has also been an added discouraging factor for female academicians since, despite their teaching competence; they cannot advance in their fields without high quality research publications. This compulsion is further offset by the debilitating pressure that is generated due to the inability on the part of the female academicians in creating a balance between their teaching/ administrative tasks and research.

4.2 Lack of Mentoring

Another area that emerged from the interviews of the women faculty members was the lack of support and guidance from peers and senior faculty members in the skill of writing good research papers. Numerous research studies identified this problem as a hindrance for females in writing academic work (Pini *et al.*, 2004; Simpson, 2000; Oakley, 2000). Our findings are mainly similar with those of Probert (2005). However, another important factor that emerged from this study is that the senior academicians are comparatively less trained in updated research tactics as compared to their novice colleagues. A junior faculty member clearly stated that "Most of our senior faculty members were hired as teachers not as researchers thus; none of them were really ever involved in research". Another interviewee stated: "current research methodologies have undergone monumental alteration with which most of the older teachers are not familiar".

One more factor that becomes a hurdle for Pakistani academicians is that research, till date, has primarily remained a male-dominated domain. One interviewee complained in the following terms, "Reviewers are more

prejudiced towards female writers and tend to play down female academicians' research capabilities." The female academicians stated that International journals tend to deprecate work coming out of a Third World country in general and raise innumerable objections that are difficult to surmount. In addition, there are too many financial hindrances in acquiring funds for supplementing research based activities at the local level in Pakistan. Funds are not issued on time if, for instance, one has to go aboard to present a research paper at an international conference. These factors, in their opinions, need to be redressed so that their research output may be enhanced.

4.3 Limited Networking

The ladies who were interviewed perceived that there is a lack of networking skills on the part of women in order to start a good networking circle for research. While networking factors may be reduced in the contemporary times owing to the plethoric burgeoning of social networking websites such as Facebook, Twitter, LinkedIn etc. and most female academicians deem it to be a waste of time or simply cite their weak internet using capabilities as a reason for avoiding research based networking. As a result, they are less aware of the openings in their respective research areas; unlike their counterparts in the West who have set up research based social networking groups. A couple of them stated that, "Social networking websites are more distracting, they cannot supplement research". Others stated that they do not check their email inboxes frequently and are not aware of CFPs and their RSS feeds.

All the interviewee stated that family and social requirements take up the left over time to leave much time and energy for research based social networking. Moreover, negotiating across national and cultural differences as well as local limitations in research facilities tends to become a barrier in getting published at the international level, specifically in impact factor journals.

4.4 Social Responsibilities

Familial obligations stemming from societal pressures remain very solid reasons for women academicians in Pakistan for their low research output. Statements like "Evening time is family time. Children and family-based social activities take up all my time", " I live with my in-laws and it becomes difficult for me to pursue academic research in the time that I

have at home" and "Household chores take up all my time at home, particularly since my husband is very demanding as far as the maintenance of a disciplined household routine is concerned" prefigured predominantly in their evaluation of the factors that hinder research output. In addition, one important factor that emerged from the interviews was the domestic pressure born by a female academician due to child rearing, attending to the requirements of a joint family system etc. In all these observations, family care remains a predominant time-consuming factor that obstructs research output by Pakistani female academicians.

5. CONCLUSIONS

The findings of this study inferred that since the formation of HEC, the number of research publications has amplified significantly across both genders annually. This is despite the fact that the number of publications on the part of male faculty members is significantly greater than that of women. However, the statistics indicate a gradual increase in awareness about research requirements in female academicians in Pakistan. This increase in research productivity is due to some of the measures taken by the HEC which, despite all the odds depicted in the interviews, has led to enhanced research productivity amongst female academicians. These factors have been categorized and discussed below:

5.1 The Establishment of the ORIC offices

The establishment of the ORIC offices in every major university was done by the HEC to streamline research not only within the universities but also among the various universities both nationally and internationally. According to the HEC the functions of the ORIC offices are the updating of data regarding funding/donor agencies, the establishment of links with donors and industries as well as to arrange and conduct seminars, conferences and training programs for faculty awareness and faculty industry interaction at both the national and international levels.

The ORIC offices provide financial support for both national and international conferences, easing issues in visa acquisition for researchers, maintaining a strict discipline in monitoring research work and its originality etc. This facility has encouraged female academicians to actively pursue research-based activities since their interaction is primarily with the ORIC offices that manage the remaining documentation requirements and facilitate the female researchers. However, bureaucratic

red-tape continues to be a hindrance in a more efficient working of the ORIC.

5.2 HEC Criteria and the Requirement for Promotions

HEC has made publications in national and international journals as a mandatory requirement for promotions in Pakistani universities, particularly under the Tenure Track System. One of the performance indicators of a department and the criterion for the promotion of faculty members set in the 'Medium term Development Framework' by the HEC is enunciated as follows:

- Number of International Journal Publications
- Number of faculty members presenting at International Conferences (HEC, 2005).

This has led to a keener interest in producing good quality research and ensuring their publication in high standard journals so that the requirements of the stringent criterion for promotions could be met with.

5.3 Increased Awareness

The establishment of the ORIC offices and the reinforcement of research culture by the HEC have led to an enhanced awareness about the importance of research, particularly within the industrial, social and pedagogical requirements of Pakistan. More and more female faculty members are now making more concerted efforts to conduct research despite of the extreme social pressures of women in Pakistan. It is owing to this enhanced awareness that the quantitative data has reflected an increase in the number of publications by female academicians in Pakistani universities.

However, one of the most eminent points highlighted by the ladies was that they were highly busy in teaching and administrative work. This does not permit them to devote more time to produce academic publications. Moreover, social and familial obligations in a family-oriented culture tend to hinder female research productivity. Women have more social and domestic responsibilities than their male counterparts and they have to go for vocation breaks at some stage of their professional life that pushes them away from the fast lane of professional development. In addition, women lack guidance and support, the opportunity for networking and cooperative work.

In sum, this article is simply a preliminary investigation into analyzing some of the factors influencing research output on the part of the female academicians in Pakistan. It is by no means complete, since, multiple factors, such as gender issues, domestic concerns; religious, cultural and social issues also leave an indelible impact on female research productivity. This study has merely initiated the discussion pertaining to female research output in Pakistan and invites further exploration in the domain.

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DIFFICULTIES POSED BY DISABILITY ON THE ACQUISITION OF HIGHER EDUCATION IN INCLUSIVE SETTING BY PHYSICALLY CHALLENGED STUDENTS

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ABSTRACT

The main purpose of this quantitative study was to investigate challenges and difficulties being encountered by physically challenged students in inclusive settings at higher education level. A self-developed and validated questionnaire (Cronbach alpha: 0.879) was employed for data collected from a sample of fifty six (56) graduate and continuing students with physical disabilities (males=46, females=10) selected through snow ball sampling technique from colleges and universities of Pakistan. The participants were required to respond on three point criteria (no, to some extent, yes). Data were analyzed by using SPSS. Independent Sample t test and One Way Analysis of Variance (ANOVA) was run to compare mean scores of responses of physically challenged students on the basis of their gender, education, types of physical disability, types of institutions, provinces, and status. Frequencies were run to have an overall picture of challenges faced by physically challenged students. Major findings reflected that physically challenged students were encountering problems in transportation, accessibility, and financial support, etc. Conclusions were drawn and recommendations were made.

Keywords: Higher education, Physically challenged students, Inclusive setting, Accessibility, Transportation.

1. INTRODUCTION

Most systems of education over the globe have always been discussing the burning issue of including students who are disabled into regular institutions. As a result, this issue has attracted the attention of educational politics in a number of countries. Children who are disabled embody a special segment of society for whom special policies and laws have been formulated stressing their full integration and participation in society especially in educational settings (Pivik, McComas, & Laklamme, 2002).

In the more recent years, schools were directed to take into consideration with great care the inclusion of students with special needs into regular classrooms. It was discouraging to keep these children into an obstructive environment (Culatta & Tompkins 1999). Inclusive education creates positive attitudes towards persons who are having a wide range of special needs. In case of inclusive education, typical students get opportunities to observe and interact with students having disabilities which make them aware of strengths and weaknesses, problems and difficulties being faced by the students with disabilities (Westwood & Graham 2000). It has long been recognized by the research that to change the attitudes of public towards persons with disabilities, it is imperative to give them information about these disabilities and have an exposure and interaction with persons with disabilities. This notion is better fulfilled through inclusive education (Bandy & Boyer, 1994).

It is a philosophical shift which stresses the full inclusion of special need students to meet the needs of all rather than just accommodating them into a normal system. This tendency is consistent with the agenda of wide social justice, which focuses on access for all children to their nearby school. This inclination has also been advocated by United Nations policies which support the rights of children (The United Nations Convocation on the Rights of the Child, 1989; The United Nations Standard Rules for the Equalization of Opportunities for Persons with Disabilities (United Nations Educational Scientific and Cultural Organization, 1994).

Many changes have taken place in the legislation of many Western countries and a number of developmental programs have been launched considering the significance of higher education for individuals with

disabilities, their families and their society. In spite of these developments, it has been found that there is low enrolment and high drop out of children with disabilities during the first year of admission (Dutta, , Scguri & Kundu, 2009). The reasons may include poor accessibility of higher education institutions, insufficient facilities extended by their institutions, humiliating attitudes of society members, social segregation, and inadequate financial support as well (Foreman, Dempsey, Robinson, & Manning, 2001).

A study investigated the difficulties being faced by students with physical disabilities in a regular classroom. He found that structures of buildings and classrooms were causing hindrance in the way of students with physical disabilities. Moreover, many students having physical disabilities could not take part in different activities. As a result, they were undergoing feelings of isolation and social rejection (Alahmadi, 2007).

Al hamad (2001) also threw light on the problems of physically handicapped students, including feelings of isolation, lack of habilitation, loneliness, rejection by the society, lack of respect, private parking, callousness towards them, non-availability of elevators and lack of purposely built entrances to help persons with physical disabilities.

The substantive purpose of this study was to investigate difficulties and challenges being faced by physically challenged students in inclusive education at higher education level. It was also intended to see the differences in the level of difficulties between male and female students with physical challenges. Moreover, it was also aimed to find out differences in difficulties being faced by different categories of students with physical challenges.

2. METHOD

The population of study consisted of all physically challenged students who had acquired higher education in inclusive setting and those who were continuing their higher education in inclusive set up. The sample of study comprised 56 physically challenged students (males= 46, females=10) who were selected through snow ball sampling technique. The complete detail of sample is presented in table I.

Table 1
Demographic Variables

Variable	Description	Number	Percentage
Gender	Male	46	82.1
	Female	10	17.9
Age (in years)	Below 20	4	7.1
	20-30	29	51.8
	31-40	21	37.5
	41-50	2	3.6
Type of Physical Disability	Wheelchair users	9	16.1
	Polio (both legs affected, using crutches)	7	12.5
	Polio (one leg affected, using stick)	30	53.6
	Both/one arm affected	6	10.7
	Muscular dystrophy	4	7.1
Institutions	Medical colleges	10	17.9
	Universities	33	58.9
	Degree Colleges	13	23.2

Education	BA. B.Sc	15	26.8
	M.A., M.Sc	21	37.5
	M.Phil, Ph.D	2	3.6
	Professionals	18	32.1
Province	Punjab	46	82.1
	Sindh	0	0
	KPK	2	3.6
	AJK	1	1.8
	Gilgit Baltistan	2	3.6
Status	Continuing students	24	42.9
	Graduates	32	57.1

After reviewing the related literature, a questionnaire consisting 41 items with three point criteria (No, To some extent, Yes) was developed by the researchers which was piloted on fifteen physically challenged students (Cron bach alpha= .52). After validating questionnaire by three experts in the field of special education and deleting seven ambiguous items, the reliability coefficient improved (Cron bach alpha=.879).

First of all, information about physically challenged students regarding their names, type of physical disability, contact numbers, names of institutions where they were enrolled, was gathered with the help of Non-Governmental Organizations (NGOs) working for persons with disabilities. Afterwards, contacts were made with them and they were briefed about the purpose of study. Total number of questionnaires distributed among physically challenged students through postal service

and electronic mail was eighty seven (87). Out of this fifty six (56) questionnaires were received back. In this way, the return rate was 64 %.

3. FINDINGS

Table 2
Independent Sample T-Test to Compare Mean Scores of Male And Female Physically Challenged Students' Responses on Difficulties Faced by Them

Variables	Gender	N	Df	Mean	t-value	Sig
Difficulties	Male	46	54	35.5	2.99	0.004
	Female	10		27.5		

Values of the table 2 indicate that a significant mean difference existed between the responses of male and female physically challenged students on the basis of difficulties faced by them. The values of male ($M = 46.27$, $SD = 1.11$) and female ($M = 27.5$, $SD = 1.01$), $t(54) = 3.99$, $p = .004$ show that physically challenged female students face more difficulties than physically challenged male students.

Table 3
Independent Sample t-test to Compare Mean Scores of Graduate and Continuing Physically Challenged Students

Variable	Gender	N	Df	Mean	t-value	Sig
Difficulties	Graduate students	32	54	33.31	-.798	.947
	Continuing students	24		35.08		

Values of the table 3 indicate that no significant mean difference existed between the responses of graduate and continuing physically challenged students for difficulties faced by them. The values of graduate students (M

= 33.31, SD = 1.11) and continuing students (M = 35.08, SD = 1.01), $t(54) = -.798$, $p = .947$ show that both of the categories faced same type of difficulties during their studies.

Table 4
ANOVA for Difference in Mean Scores of Difficulties Being Faced by
Students Having Different Types of Physical Disabilities

Variable	Gender	N	Mean	t-value	Sig
Between group	915.407	4	228.852	4.204	0.005
Within group	2776.307	51	54.437		
Total	3691.714	55			

Results of table 4 reflect that one way analysis of variance showed that there was significant difference in mean scores of responses of students having different types of physical disabilities $F(4.51) = 4.2$, $p = .005$.

Table 5
Descriptive Statistics

Variables	N	Mean	Standard Deviation
Wheelchair users	9	29.13	1.356
Polio (with crutches)	7	26.92	4.092
Polio (with stick)	30	27.22	3.388
Arm affected	6	21.52	5.559
Muscular dystrophy	4	25.95	2.964
Total	56	26.12	4.413

Table 5 shows mean scores of responses of students with different types of physical disabilities for difficulties faced by them. It is evident that wheelchair users were facing more difficulties than students who were using crutches due to polio. Students whose one leg was affected due to

polio and they were using stick were facing fewer difficulties than those who were using crutches. Students with arm disability were facing relatively lesser difficulties than other types of physical disabilities.

Results of table 6 reflect that one way analysis of variance showed that there was no significant difference in mean scores of responses of students studying in different types of institutions $F(4, 53) = 1.31, p = .28$

Table 6
Descriptive Statistics

Variables	N	Mean	Standard Deviation
Medical Colleges	10	35.9	9.27901
Universities	33	32.6061	7.48724
Government Colleges	13	36.3846	8.89324
Total	56	34.0714	8.19281

It is evident from the table 6 that the differences in mean scores of responses of students with disabilities studying in different type of institutions were not significant.

Table 7
ANOVA for Difference in Mean Scores of Difficulties Being Faced by Physically Challenged Students on the Basis of Type of Education

Sources of variation	SS	DF	MS	F	Sig.
Between group	57.798	3	19.266	0.276	0.843
Within group	3633.916	52	69.883		
Total	3691.714	55			

Table 8
Descriptive Statistics

Variables	N	Mean	SD
B.A., B.Sc	15	34.5333	9.24173
M.A, M.Sc	21	32.8095	7.18762
M. Phil, Ph.D	2	36	7.07107
Professional	18	34.9444	8.92763
Total	56	34.0714	8.19281

It is evident from table 7 & 8 that the difference in mean scores of responses of students with disabilities getting different types of education was not significant.

Table 9
ANOVA for Difference in Mean Scores of Difficulties Being Faced by Physically Challenged Ctudents in Different Provinces

Sources of variation	SS	Df	MS	F	Sig.
Between group	264.688	3	66.172	0.985	0.424
Within group	3427.026	51	67.197		
Total	3691.714	55			

Results of table 9 show that one way analysis of variance did not reflect significant difference in mean scores of responses of students with disabilities in different provinces $F(3, 51) = .98, p = .42$

Table 10
Descriptive Statistics

Variables	N	Mean	Standard Deviation
Punjab	46	33.2826	8.04615
KPK	2	32.5	10.6066
Balochistan	5	37.4	9.37017
AJK	1	43	.
Gilgit/ Baltistan	2	41	7.07107
Total	56	34.0714	8.19281

It is evident from table 10 that difference in mean scores of responses of students with disabilities in different provinces was not significant.

4. DISCUSSION

The present study was conducted to find out problems, challenges, and difficulties being encountered by physically challenged students at higher education level in inclusive setting. Majority of the physically challenged students (93%) reported that elevators had not been fixed in the colleges and universities for easy movement of physically challenged students. Moreover, it was also reported by a vast majority (80.4%) of physically challenged students that ramps had not been constructed at entrances of institutions. Lifts had not been fixed (as reported by 89.3% physically challenged students) in higher education institutions. These findings are consistent with studies conducted by Alahmadi, 2007 and Al hamad, 2001 who found that inaccessible structures of buildings and classrooms, non-availability of elevators and lack of purposely built entrances were causing problems for students with physical disabilities in acquisition of higher education.

Majority of the students (91%) expressed their positive views regarding assistance, cooperation, and respect extended to them by their teachers, classmates, and other community members. The same views were reported by students with hearing impairment (Safder, Akhtar, Fatima, & Malik, 2012) and visual impairment (Fatima, Akhter, Malik, Safder,& Nayab, 2013), (Fatima, Bashir, Malik, & Safder, 2014) in three studies conducted to find out problems and difficulties being faced by students with hearing impairment and visual impairment in inclusive setting at higher education

level in Pakistan. It reflects that attitudes of people towards persons with disabilities are positive, sympathetic, and cooperative which is the beauty of inclusion. This notion finds consistency with the views expressed by (Westwood & Graham, 2000), (Bandy & Boyer, 1994), (Carroll, Forlin & Jobling, 2003), (Lombard, Miller & Hazelkorn, 1998). These researchers are of the view that in case of inclusive education, students without disabilities find chances of having interaction with students with disabilities which enable them to understand their weaknesses, problems and difficulties. This understanding, ultimately, change their attitudes towards persons with disabilities. This change in public attitude can be brought about through inclusive education.

A good number of physically challenged students (67 %) reported that their college and university fee had not been a hurdle in the acquisition of education. It is due to two reasons: first, government has exempted the fee of students with disabilities; second, merit and needy scholarships are being awarded to students with disabilities by the government (Government of the Punjab, 2013) and non-governmental organizations as well. But this finding is not consistent with the findings of the studies conducted by (Dutta Scguri & Kundu, 2009) and who found that there was a low enrolment and high drop out of children with disabilities during the first year of admission. Many reasons were pointed out in this regard. Among all these, one important reason was inadequate financial support.

Another important result of the study reflected that physically challenged female students were facing more difficulties than physically challenged male students. This result agreed to a result of a study conducted by which indicated that females with handicaps who had moderate level of disabilities faced more social problems than male counterparts. Furthermore, no significant differences were found in difficulties on the basis of types of institutions, types of education, and provinces etc. It reflects that no considerable arrangements had been made in colleges and universities for the facilitation of physically challenged students who were studying in inclusive setting at higher education level.

5. IMPLICATIONS OF THE STUDY

The study has some implications. First of all, it has brought into light the existing condition of medical colleges, universities, and colleges regarding provision of transportation, accessible buildings (libraries, computer labs, science laboratories, toilets with adaptations, mosques, ablution places etc.) to physically challenged students. It has also focused on financial support given to these students. Attitudes of teachers, class fellows, and general community towards them have also taken into consideration. The following points should be considered for reducing the problems and difficulties of physically challenged students:

1. Transport with adaptations for the users of wheel chairs, crutches, stick, braces, and artificial limbs should be provided by all institutions where physically challenged students are registered for higher education.
2. The notification issued by the Government of the Punjab, Pakistan in connection with the construction of accessible buildings (ramps, pathways, toilets) in all government institutions should be enforced in true letter and spirit. A plan of action should be prepared for its emergent implementation. It should also be made mandatory for all private sector buildings.
3. Attendants for the assistance of physically challenged students should be appointed in all male and female hostels.
4. All obstacles, barriers, and hindrances should be removed to provide a barrier free environment to all physically challenged students for their safe and protected movement.
5. All physically challenged students should be encouraged to take part in sports and games making special arrangements keeping in view their specific disability.

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FINANCIAL DIFFICULTIES FACED BY PARENTS OF CHILDREN WITH DISABILITIES

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ABSTRACT

The principal effort of this modest venture has been to highlight the problems and barriers in the development of the child with disability. Broadly, there are three divergent approaches to study the problem of disability; namely the medical, economic and the functional limitations. The basic theme of the paper is that, the society by its perceptions and conceptions of people with disabilities can effectively create more handicap than the disability itself. From this vantage point, an economic factor impeding the development of the disabled is located within the society that discriminates, ostracizes and stigmatizes than the disabled person himself.

Keywords: Financial Difficulties, Parents, Children, Disabilities, Perception, Society.

1. INTRODUCTION

Since the past few decades, the development of deprived sections of population including the disabled has been a subject of interest to many disciplines and their deprived status is often found to be attributed to two factors (Michalko, 2002). Firstly, to a greater extent the disadvantaged groups, possess little by way of training of skills which would enable them to extract a better economic return for their labor and secondly, all these groups possibly for different reasons have not developed sufficiently powerful organizations for collective actions to bring pressures on employers or the Government for an improvement of their economic position and social status. However in the case of the disabled, together with their inability to extract a relatively large a share of increasing national production; they are also subjected to negative attitudes and perceptions by the larger society (Oorschot & Hvinden, 2001).

Oliver (1990) reported that the position of the disabled even in the contemporary society makes one wonder whether the vestige of earlier culture still cast a shadow in the approaches extended by the broader society to them. They have to contend still with uncertainty, mistrust and downright discrimination in their interaction with other fellow beings. They are often stigmatized, pitied, ignored, patronized and reacted with solicitude and controlled behavior.

Sometimes it occurs as though the truculent attitude on the part of the society is the greatest hurdle the disabled is called upon to surmount (Reeve, 2003). In fact, this particular section of population who are alike normal; except for their physical impairments are subjected to the negative attitudes and perceptions of the larger society to such an extent that they remain alienated structurally from the society to which they belong (Barnes, 1996). As a result they also become incapable of fulfilling the normal social roles as members of the community and participating in the normal economic, political and cultural activities of their society on par with the able-bodied.

Disability as a universal phenomenon is one of the major causes for dependency and deprivations throughout the world. However causes leading to it and its magnitude vary from country to country and society to society. O'Toole and McConkey (1995) indicated that "In developed-

industrial society where disabilities are mainly due to occupational hazards, industrial and traffic accidents and age-factor, the magnitude of disability is comparatively less than in developing society". They further highlighted some of the major factors leading to high prevalence of disability in developing society which included, a high proportion of impoverished and overburdened families, a high rate of illiteracy and lack of information about routine measures of health, education and welfare, an absence at all levels of accurate information about disability, its causes, prevention and treatment, insufficient programs for prevention of conditions that cause impairments and inadequate services to respond to impairment and disability; obstacles such as lack of money, geographic distance and social barriers to take advantage of the service that may exist and low priority given in development strategies to activities related to disability prevention and rehabilitation . Thus the general trend has been that the incidence and impact of impairment, disability and handicap are greater in countries in the earlier stages of economic and social development than in the more advanced societies.

According to World Health Organization (WHO, 2011) estimate, the magnitude of disability in the developing society is likely to increase in future if traditional theories of economic development continue to dominate with their irreversible inequality in the distribution of income. Though efforts are being taken in developing countries in controlling the disabling conditions and rehabilitating the disabled, the situation still remains unsatisfactory. The WHO explains this by stating that, planners particularly in developing countries seem to overlook the needs of disabled people as a result of giving first priority to meeting the needs of the greatest numbers thus, keeping disabled people and their families amongst the lowest strata of society.

With respect to rehabilitation services in Pakistan it may be stated that they are very limited and diffused in nature. Moreover, these services are appallingly inadequate in its quality, emphasis, and coverage of population. Most of them are located in urban centres, catering to a very miniscule percentage of the total population to the total neglect of rural areas where the bulk of disabled people live (Sulman, 2015).

The main reasons for the inadequacy of services in Pakistan may be put into two: one is the general ignorance at all levels of the conditions of the

disabled and the other is the insufficient allotment of funds for services. The latter is due to the fact that in a country where living standards are generally poor and where there are a host of problems to be tackled, the allotment of funds for disability prevention and rehabilitation tends to be low or modest. In certain others it occurs due to an improper understanding about the significance of rehabilitation programs.

Literature related to disability gives evidence of the impact of social and environmental forces on the development of intellectual and social competence of the disabled since the day of Itard (Abberley, 1987). It is said that un-stimulating environment, cultural deprivation and poverty are the principal barriers which impede the proper growth and development of disabled persons.

Disability can place heavy burdens upon those who must care for the disabled, sometimes causing a reduction in the economic performance of the care providers. A loss in psychic well-being while limiting economic capability of the disabled person may also effect the economic productivity of his or her family and friends. Economic losses are possible in future based on the potential effect disability has on the health and well-being of the children of the disabled people. Additional indirect effects such as property losses and marital instability may be present but are rarely included within any analysis.

The present study thus aims to analyses the financial problems and barriers in the development of the disabled child faced by parents. The main thrust of this modest enterprise is:

- To determine the role of family's acceptance of various facilities and measures in facilitating the development of the disabled, and
- To highlight the specific problems faced by the parents of disabled children.

2. METHODOLOGY

In the absence of reliable statistics or a system to maintain the list of disabled persons, the study had to limit the area so as to overcome the above limitations. Also, being a single-handed study with limited resources and constraint of time, the area of the study is restricted. The study has been undertaken in a special school, namely DEWA School for

Children with Special Needs. Specific reasons for selecting DEWA school as the universe for the study because, it allows the investigator to interview parents independently without any disruption. Secondly, since disabled people have had exposure to certain developmental activities - medical, educational, vocational etc., it gives an additional advantage of studying the level of development in a big complex and the impeding social factors which hinders the process of development.

The field work was conducted in two phases. First and foremost to get to know the feasibility of the study, a pilot study was conducted in the area. This was helpful in acquainting with the minutest details of the cases selected and to bring an awareness of certain pertinent points that need to be covered while formulating the tool for the collection of data. The tool was pre-tested in ten mothers. The interview schedule was structured in accordance with the objectives of the study. In addition to this, to understand the position of the family of disabled child in contemporary society certain background information were collected. For this purpose some relevant variables regarding disability and social background [occupation, income and education] were considered.

During the second phase of fieldwork the researcher resorted to other informal methods to fill in the gaps as well as to supplement the data already been collected. Informal discussion had been conducted in the field of 'disability' and with the organizers of various associations for the disabled.

The data collected were analyzed by computer applications using the variables – nature, type and onset of disability, education of the parents, income and occupational status. Chi-square tests were applied to test the significance of relationships. To assess the integration of the disabled in the family, neighborhood, peer group and work situation in school; Likert Scale was applied with appropriate statements and response categories.

3. FINDINGS

For the analysis of problems confronted by parents, mother has been selected as the respondent owing to the fact that the role of mother is more crucial for the up-bringing of a dependent child with disability. To project the financial problem met by the mother which applies to her whole family, following factors such as, financial difficulty incurred by disability related

expenditure, necessity of necessity of sacrificing the other needs of the family, type of financial commitments incurred due to disability and the resultant indebtedness have been taken into account.

As for financial difficulty, except in the case of children with hearing impairment, in all others a high percent of mothers report of having financial strain. In the case of these children if less number of mothers did undergo financial strain, it could be due to certain characteristics of the particular disability. These hearing impaired children are usually either born with disability or acquire it at an early age. In most of the congenital cases, the disability being complete and permanent, chances for their recovery are almost nil. Hence, parents of such children may at the most seek expert opinion only to confirm their disability and their expenditure ends there.

Table 1
Type of Disability and Financial Difficulty

Type of Disability	Difficulty		Total
	Present	Nil	
Hearing Impairment	4 (17%)	19 (83%)	23 (33%)
Visual Impairment	2 (100%)	-	2 (1%)
Physical Handicap	35 (82%)	8 (18%)	43 (63%)
Multiple Disability	2 (100%)	-	2 (3%)
Total	43 (61%)	27 (39%)	70 (100%)

In the case of children having partial disability, in majority of cases their condition could be improved by using hearing aid. But rather high cost of hearing aid prevents most of the parents who belong to socio-economically backward classes from taking an honest effort to procure it. Though there 'is a provision to get it at reduced cost or free of cost through

welfare agency, long duration of waiting and formalities involved in it discourage parents to opt it. More over certain children may not be very receptive to it and again to use it proficiently the child may have to go through a few sessions of speech therapy which again involves a lot of time and expenditure. Hence, it may be concluded from the present study that if children belong to the lower income groups and parents have low educational background they are more inclined to leave the disability of children with hearing impairment to take its natural course, rather than take a recourse to treatment.

Other than these factors, almost normal physical appearance of these children and their unobstructed character of disability further deteriorate the possibility of their being given any proper treatment. In the case of children with hearing impairment, the seriousness of their problem is often not appraised properly and as a result they constitute a neglected section of disabled children. When financial difficulty incurred due to disability has been analyzed on the basis of nature of disability it only reaffirms the conclusion drawn above.

Among the different measures adopted by mothers to meet the financial difficulties on account of their children, a greater number has been found to compensate for the extra expenditure involved by reducing the basic needs of the family.

A closer examination of the table-2 however shows that while, parents of children with visual impairment as well as hearing impaired children mainly reduced their basic needs to alleviate the financial strain, parents of children with physical handicap took recourse to other means also. When the extra expenditure is nominal but yet, difficult to accommodate within the weak infrastructure of the family, parents tend to solve the problem by reducing the basic needs of the family as it is the most easily available means.

Table 2
Type of Disability and Nature of Financial Difficulty

Type of Disability	Difficulty				Do not apply	Total
	Reduction in the basic needs	Limiting educational expenses	Limiting social activities	Any other		
Hearing Impairment	3 (13%)	-	1 (4%)	-	19 (83%)	23 (33%)
Visual Impairment	1 (50%)	-	-	1 (50%)	-	2 (100%)
Physical Handicap	16 (36%)	1 (2%)	7 (16%)	11 (27%)	8 (18%)	43 (63%)
Multiple Disability	-	1 (50%)	1 (50%)	-	-	2 (3%)
Total	20 (28%)	2 (3%)	9 (13%)	12 (17%)	27 (39%)	70 (100%)

In the case of physically handicapped children, their mothers have been found to limit all other available expenses to meet the disability related expenditure. Only if the expenditure goes beyond these they envisage on cutting or limiting the expenses related to social activities. This invariably points at the importance attributed to social purposes by the socio-economically backward class. It may therefore be stated that among the economically backward group the negligible importance they give for the basic needs can be, one of the factors responsible for higher prevalence of disability among them. However, instances of relinquishing the education of other children for the benefit of disabled child have been very negligible.

Parents of disabled children other than being pressed to make financial adjustment by limiting the expenses of the family sometimes may enter into financial crisis also. Table-3 points out that the incidents of lending money have been high among them in contrast to the single instance of, 'selling property' for ameliorating the crisis. Again, lending from other sources has been found very high in the lower income group. The chi-square value shows that there is a significant relationship between the

income and the means opted for relieving financial strain. This statement itself is self-explanatory, in the sense, families belonging to this particular group having no other alternative measures to relieve their financial strain, consider lending as their only available resort.

Table 3
Income and Means Opted to Meet Financial Difficulty

Income (In Rs./=)	Means					Do not apply	Total
	Lending	Pawning	Selling Property	Mortgaging	Other Sources		
Below 10000	27 (61%)	2 (5%)	1 (2%)	3 (7%)	1 (2%)	10 (23%)	44 (63%)
10000 - 25000	3 (25%)	-	-	-	3 (25%)	6 (50%)	12 (17%)
25000 - 50000	2 (15%)	-	-	-	-	11 (85%)	13 (19%)
More than 50000	1 (100%)	-	-	-	-	-	1 (1%)
Total	33 (47%)	2 (3%)	1 (1%)	3 (4%)	4 (6%)	27 (39%)	70 (100%)
$\chi^2 = 15.2$, $df=4$, Tabulated value= 9.5 at 5% level of significance							

The data also show the negligible instances of having indulged in other alternatives such as pawning, mortgaging etc. On the whole, it may be said that the financial strain due to disability is felt more by the lower income groups and their weak infrastructure goes even more brittle due to the additional financial commitments it has to bear with. In fact, the low socio-economic level which constitutes one of the major causes to disability becomes further adversely affected by the onset of disability with its inherent problems.

The feeling of isolation is, yet another problem experienced by the parents of disabled children. In order to assess the isolation they endure, it has been analyzed how far these families could rely in times of need on their parents, in-laws, and other relatives and so on. Table 4 indicates that there has been an only negligible instance of complete denial of help at a time it

was most required. Otherwise, irrespective of the type of disability children possess, help has been extended to their mothers either by their own parents or in-laws. But there has not been any single instance of having been helped by other relatives. This stresses the fact that in the present day society where relationship between persons are becoming superficial and formal even in rural situation; the binding, intimate relationship that exists between parents and siblings provides solace to parents of disabled children in times of need. In other words, feelings of isolation have, been avoided in these families by strong kinship ties.

Table 4
Type of Disability and Help from Outside

Type of Disability	Help				Do not require	Total
	Parents	In-laws	Other relatives	None		
Hearing Impairment	- (52%)	12 (52%)	-	1 (4%)	10 (44%)	23 (33%)
Visual Impairment	-	1 (100%)	-	-	-	1 (1%)
Physical Handicap	11 (25%)	28 (64%)	-	-	5 (11%)	44 (63%)
Multiple Disability	1 (50%)	1 (50%)	-	-	-	2 (3%)
Total	12 (17%)	42 (60%)	-	1 (1%)	15 (22%)	70 (100%)

4. DISCUSSION

On account of their children's disability, a substantially large number of mothers undergo financial strain. However, in cases where normal functioning is intact within certain limits the families are less likely to incur financial strain. Added to this, in certain specific disability like, hearing impairment the normal appearance and unobstructive nature of disability, the limited availability of hearing aids and minimal facility

available for speech therapy make expenditure incurred for its treatment, comparatively less.

Whereas, in the case of other disabilities to accommodate the extra expenditure, families are forced to limit the expenses for the basic needs. But a striking factor that emerges here is that families make attempts to reduce their expenses for social activities only if attempts at other fronts prove insufficient. This indicates that social activities are perceived high by the lower income group at the neglect of their family's health. However, schooling of children has rarely been stopped on account of the financial strain.

The financial strain being more pervasive in the lower income group to alleviate the resultant crisis they often resort to lending as they have inherent restraints in raising funds through other means. Thus for the lower income group, their low socio-economic condition which has been one of the major causes for the high prevalence of disability gets further deteriorated due to the onset of disability. The threat of isolation has seldom been very acute.

The study being local based values where inter-personal relationships are more intact, at the time of crisis mothers could count on their families for help. Social problems also evolve when they fail in their socially expected roles. Majority of mothers however, are found managing their other duties with the help they could well attain within their family. Thus, it may be stated that as long as there is strong kinship tie the mothers of disabled children have little cause to experience any social problem.

A family's income, level of education, and the social status associated with the type of occupation the breadwinners of the family have, from the family socioeconomic status [SES] (Turnbull et al., 2006). SES influences the way families fulfill their major functions and it influences the quality of life of all its members, including a child's growth and development. Poverty means lack of opportunity, inequality, and constant struggle with social problems such as school failure, inadequate housing, unemployment, and so on (Enwefa, Enwefa & Jennings, 2006).

Research shows that families of children with disabilities experience significantly greater hardship and material shortage than other families

(Parish, Rose, Grinstein-Weiss, Richman, & Andrews, 2008). For families of children with disabilities who live in relatively lower socioeconomic families, real-life stressors that they face on a day-to-day basis compounded by the stressors of having a child with disability and securing disability related services and support (Parish et al., 2008). Often, lack of financial resources becomes a barrier for these families to secure appropriate services for their children (Fujiura & Yamaki, 2000). For example, lack of transportation or specialized transportation often has additional expenses for assistance in caring for their children. It is truly a major problem for many families of having a child with disability. This problem often makes educational and therapeutic services inaccessible for these children who grew up either in middle or lower socioeconomic status (Preston, 2011).

For families who struggle to survive from day-to-day, achieving a developmental or academic outcome for the child might not be a priority. When we work with poverty-stricken families and families with low SES, the reality of life for these families on day-to-day basis should be kept in mind.

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KNOWLEDGE AND ATTITUDES OF ELEMENTARY SCHOOL TEACHERS TOWARDS SPECIFIC LEARNING DISABILITIES

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ABSTRACT

With a sample of 150 elementary teachers from mainstream public schools of Sialkot (Pakistan), this descriptive study has investigated the participants' knowledge of and attitude towards Specific Learning Disabilities (SLDs). Data from the participants was collected through two survey questionnaires on 5-point Likert scale. Both questionnaires were validated through pilot testing which generated reliability scores at the Cronbach's α (alpha) .802 & .792 respectively. The correlation between the attitudes of male and female participants was derived through an independent sample t-test. The correlation between the attitudes of the participants on the basis of their qualifications as well as experiences was calculated through one way ANOVA. The Pearson correlation coefficient was also computed to find the relationship between the participants' knowledge of SLDs and their attitude towards the teaching of children with SLDs. The results show that the majority of participants has basic knowledge of SLDs; however, the participants having greater experience and holding higher qualification, irrespective of their gender, has more positive attitude towards the teaching of children with SLDs than others. The participants' responses have depicted that the elementary schools of Sialkot do not have enough facilities to meet the needs of the children with SLDs; extra-curricular activities increases the educational problems of students with SLDs.

Key words: Teacher, Elementary Education, Knowledge, Attitudes, Learning disability.

1. INTRODUCTION

Barnes-Holmes, & Moors (2013) defined learning as “changes in behavior that result from experience or mechanistically as changes in the organism that result from experience.” From academic perspective, learning has commonly defined “as the process of acquiring of new knowledge, behaviors, skills, values, preferences or understanding, and may involve synthesizing different types of information” (Adebowale & Moye, 2013). Schools are usually considered as “Learning Places” where children discover, connect, share and grow new ideas in supervised and un-supervised learning environments. However, some children face difficulties in performing various academic and intellectual tasks. Consequently, they could not keep up with the school curriculum and fail to produce the expected results. Such children are usually labeled as children with learning disabilities (Klatt, 1991; Hallahan, et. al., 2005; Kavale & Forness, 2003).

Learning disabilities is a generic term which has been defined in different ways. Pandit, Archana, and Ashok (2009, p84) have define it as “the seemingly unexplained difficulty a person of at least average intelligence has in acquiring basic academic skills. These skills are essential for success at school and at work, and for coping with life in general.” Learning Disabilities Association of America (LDAA, 2005) defines learning disabilities as a diverse set of characteristics that affect individual’s development and achievement. Learning Disabilities Association of Canada defines learning disabilities as “a number of disorders that may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information. These disorders affect learning in individuals who otherwise demonstrate at least average abilities essential for thinking and/or reasoning. As such, learning disabilities are distinct from global intellectual deficiency.”

In literature, learning disabilities have been associated with a diverse group of disorders which may affect neurocognitive processes and may manifest as an imperfect ability/problems with language and reading (Dyslexia), with arithmetic and math concepts (Dyscalculia), with writing or fine motor skills (Dysgraphia), with motor coordination (Dyspraxia), with understanding spoken language (Aphasia/Dysphasia). It has also been associated with Central Auditory Processing Disorder (problems with

processing and remembering language-related tasks), Non-Verbal Learning Disorders (problems with nonverbal cues), Visual Perceptual Disorder (problems with visual motor skills), Auditory Processing Disorder (a weakness in the ability to understand and use auditory information), Visual Processing Disorder (a weakness in the ability to understand and use visual information), Executive Functioning Disorder (weaknesses in the ability to plan, organize, strategize, remember details and manage time and space efficiently), Attention Deficit/Hyperactivity Disorder (ADHD) (a brain-based disorder that results in significant inattention, hyperactivity, distractibility or a combination of these characteristics) (Fletcher et. al, 2002; Handler and Fierson, 2011; Dapudong, 2013).

Learning disabilities are usually divided into two key categories: (i) Global Learning Disabilities (GLD): the children with GLDs are labeled as “slow learners”. They find difficulties/problems in all aspects of learning/understanding regardless of environment or teaching strategies. (ii) Specific Learning Disabilities (SLDs): as Karande (2008) defines: “is a group of neurodevelopmental disorders which manifest in childhood as persistent difficulties in learning to efficiently read (“dyslexia”), write (“dysgraphia”), or do simple mathematical calculations (“dyscalculia”) despite normal intelligence, conventional schooling, intact hearing and vision, and adequate motivation and socio-cultural opportunities”. According to estimation, 2% to 40% of the population of school children usually has trouble with their learning (Ahmed et. al, 2003). Such children may be bright and of at least average intelligence but they are too often misunderstood and being taught and assessed according to normal norms (Mercer and Pullen, 2011). It makes them more vulnerable to social, behavioral, personal, and emotional problems (Phil & McLarnon, 1984), like antisocial behaviors, depression, low self esteem, suicide, substance abuse, and unemployment (Widerholt, 1978; Moffitt, Gabrielli, Mednick, and Schulsinger, 1981; Torgesen, 2004; Westwood, 2008). Sometime, they also being rejected by their peers or victimized in various forms of bullying (Frederickson, 2010); and if have not received appropriate intervention or help, they tend to drop out of school (Malmgren, Abbott, & Hawkins, 1999) which may lead to create some negative effects on their behavior (Essa and El-Zeftawy, 2015). This descriptive study has been delimited to SLDs.

Teachers play a tremendous role for ensuring the equitable learning experiences to the children with disabilities (Farooq, 2012). Their role is equally important in achieving full educational and social integration of children with learning difficulties within the school and society. Teachers' knowledge and attitudes towards the teaching of children with learning disabilities have received unprecedented interest all over the world since the announcement of the United Nations Convention on the rights of persons with disabilities (UN 2008). Many contemporary approaches to education suggest that the attitude of teachers is an important component of the dynamics of the education of children with learning disabilities (Rose, 2001). Teachers' knowledge about disabilities, attitude towards children with disabilities and competencies to handle the children enables them to offer appropriate intervention or help (Reddy, 2006, Fatahi, 2007). It can also help them to develop an environment which incorporates findings and recommendations of the latest research and choose appropriate strategies for the teaching of children with LDs (Jerome, 2007). Many latest researches have shown that recognizing the students with learning difficulties and employing appropriate pedagogical methods provide a lot of improvements in the students' performance and skill. Hence, it is too important for teachers to understand how these children learn, what type of attention they require, and how should they be taught and assessed. Such knowledge will make it possible to diagnosis learning disabilities in time and develop appropriate intervention.

Mainstream school teachers usually face difficulties in handling children with learning disabilities. It may be due to many reasons. Robuck(2009) has highlighted some of these reasons: "First, teacher training programs devote little to no class hours to understanding challenges students with particular disabilities face and how to help them learn. Second, general education teachers typically don't sign up for continuing education classes that focus on effective ways to teach kids with learning disabilities or AD/HD. Last, most school districts do not provide ongoing in-service training for teachers about teaching kids with special needs." In this context, the aim of the study is to examine the knowledge of, and attitude of mainstream elementary school teachers towards the teaching of children with specific learning difficulties.

2. METHODOLOGY

The descriptive study is carried out in the city of Sialkot to determine the knowledge and attitude of elementary school teachers towards the teaching of children with learning disabilities in mainstream schools. Using the random sampling technique, a sample of 150 elementary teachers was selected from public sector schools; 47% male and 53% females. From the selected sample, 40% were having a qualification of B.A, B.Sc., or B.Ed.; 56% were holding a masters degree (M.A, M.Sc., or M.Ed.) qualification, and only 4% were holding post-graduate qualification (M. Phil or MS). On experience grounds, 15% were having one to five years of experience, 15% were having six to ten years of experience, 16% were with eleven to fifteen years, 27% were with sixteen to twenty years of experience, and the remaining 27% were with twenty one to twenty five years of experience.

For collecting the data from the participants to achieve the study's objectives, two survey questionnaires were developed. The first questionnaire aimed to collect participants' responses about their knowledge of learning disabilities; particularly on three learning disabilities. It consisted of 26-item, divided in three parts: (i) Dyslexia – seven (7) items, (ii) Dysgraphia – Nine (9) items, (iii) Dyscalculia – (9) items. The second questionnaire, consisted of 14 items, was designed to collect participants' responses about their attitude towards the teaching of children with disabilities. Both questionnaires were designed using the 5-point Likert scale: Strongly Disagree (SD); Disagree (D); Neutral (N); Agree (A); and Strongly Agree (SA). Both questionnaires were validated by pilot testing on 50 randomly selected teachers which generated reliability scores at the Cronbach's α (alpha) .802 & .792 respectively, which validate the internal consistency of both questionnaires.

Descriptive statistics, t-test, ANOVA and the Pearson correlation coefficient were used for data analysis. The correlation between the participants' knowledge about learning disabilities and their attitudes towards the teaching of children are shown using mean scores. The correlation between the attitudes of male and female participants was derived through an independent sample t-test. The correlation between the attitudes of the participants on the basis of their qualification as well as job experience was calculated through one way ANOVA. The Pearson correlation coefficient was computed to find the relationship between the

attitude of participants towards the teaching of children with learning disabilities and their knowledge of disabilities.

3. FINDINGS

The Table 1 shows the frequency of the participants' responses to the statements formulated to assess their knowledge of SLDs. The participants' responses to the statements (Seven (7) statements about Dyslexia, Nine (9) statements about Dysgraphia, and Nine (9) statements about Dyscalculia) were summed up and presented in percentage and mean scores values.

Table 1: Participants' Responses about their Knowledge of Learning Disabilities							
Disability Type	Average Response Rate					Total	Mean score
	SD	D	N	A	SA		
Dyslexia – Seven (7) items,	2%	25%	12%	45%	16%	100%	3.49
Dysgraphia – Nine (9) items	2%	26%	11%	47%	14%	100%	3.33
Dyscalculia – Nine (9) items	4%	23%	12%	45%	16%	100%	3.53

The participants' responses to the seven (7) statements about Dyslexia (2% Strongly Disagreed, 25% Disagreed, 12% Neutral, 45% Agreed, and 16% Strongly agreed with a Mean score of 3.49) depict that most of the participants were sufficiently aware of the symptoms of Dyslexia learning disability. Similarly, their responses to nine (9) statements about Dysgraphia (2% Strongly Disagreed, 26% Disagreed, 11% Neutral, 47% Agreed, and 14% Strongly Agreed with a Mean score of 3.33) depicts that most of the participants were sufficiently aware of the symptoms of Dysgraphia learning disability. The participants' responded to Nine (9) statements about Dyscalculia (Strongly Disagreed 4%, Disagreed 23%, Neutral 12%, Agreed 45%, and Strongly Agreed 16% with a Mean score of 3.53) depicts that most of the participants were sufficiently aware of the symptoms of Dysgraphia learning disability.

The participants' responded to 14 items asked to investigate their attitude towards the teaching of children with SLDs are shown in Table 2.

Table 2: Participants' Responses Attitudes towards the Teaching of Children with LDs								
	Statement	SD	D	N	A	SA	Total	Mean score
1	I give extra time to the children with learning disabilities as compare to normal children.	2 1%	30 20%	19 13%	54 36%	45 30%	150 100%	3.73
2	I give more reading opportunities to those children who are having reading problems.	1 1%	31 21%	15 10%	75 50%	28 18%	150 100%	3.65
3	I design special assignments for children with learning disability to improve their performance.	1 1%	35 23%	28 19%	53 35%	33 22%	150 100%	3.54
4	There are not enough facilities to meet the needs of the children with learning disability.	3 2%	38 25%	14 9%	67 45%	28 19%	150 100%	3.52
5	I feel assistant teachers should be provided in classes having students with learning disability.	3 2%	37 25%	17 11%	54 36%	39 26%	150 100%	3.59
6	I encourage students with learning disability to participate in extra-curricular activities.	3 2%	33 22%	14 9%	66 44%	34 23%	150 100%	3.63
7	Extra-curricular activities increases the educational problems of students with learning disability	12 8%	47 31%	13 9%	52 34%	26 18%	150 100%	3.22
8	I always try to maintain self-esteem of students with learning disability.	1 1%	38 25%	15 10%	66 44%	30 20%	150 100%	3.57
9	Teachers can manage destructive behavior of children with learning disability through involving them in classroom activities.	6 4%	39 26%	25 17%	56 37%	24 16%	150 100%	3.35
10	I always consult head teachers about educational problems of children with learning disability.	2 1%	37 25%	23 15%	52 35%	36 24%	150 100%	3.55

11	I always discuss educational plans with parents to overcome educational problems of students with learning disability.	2 1%	45 30%	18 12%	53 35%	32 21%	150 100%	3.45
12	Parents of children with learning disabilities always show cooperative attitude.	3 2%	41 27%	21 14%	56 37%	29 20%	150 100%	3.44
13	Children with learning disability should be taught in main stream schools.	9 6%	35 23%	19 13%	58 38%	29 20%	150 100%	3.42
14	I need more training in order to appropriately teach students with learning disabilities.	11 7%	26 17%	26 17%	64 43%	23 16%	150 100%	3.41

The participants' responded to the statement # 1 (1% Strongly Disagreed, 20% Disagreed, 13% Neutral, 36% Agreed, and 30% Strongly Agreed with a mean score of 3.73) show that the majority of the participants gave extra time to the children with learning disabilities as compared to normal children.

The participants' responded to the statement # 2 (1% Strongly Disagreed, 21% Disagreed, 10% Neutral, 50% Agreed, and 18% Strongly Agreed with a mean score of 3.65) show that majority gave more reading opportunities to those children who were having reading problems.

The participants' responded to the statement # 3 (1% Strongly Disagreed, 23% Disagreed, 19% Neutral, 35% Agreed, and 22% Strongly Agreed with a mean score of 3.54) show that majority of the teachers design special assignments for children with learning disability to improve their performance.

The participants' responded to the statement # 4 (2% Strongly Disagreed, 25% Disagreed, 9% Neutral, 45% Agreed, and 19% Strongly Agreed with a mean score of 3.52) show that in elementary schools of Sialkot there are not enough facilities to meet the needs of the children with learning disability.

The participants' responded to the statement # 5 (2% Strongly Disagreed, 25% Disagreed, 11% Neutral, 36% Agreed, and 26% Strongly Agreed with a mean score of 3.59) show that the majority of the teachers felt that assistant teachers should be provided in classes having students with learning disability.

The participants' responded to the statement # 6 (2% Strongly Disagreed, 22% Disagreed, 9% Neutral, 44% Agreed, and 23% Strongly Agreed with a mean score of 3.63) show that the majority of the teachers encouraged students with learning disability to participate in extra-curricular activities.

The participants' responded to the statement # 7 (8% Strongly Disagreed, 31% Disagreed, 9% Neutral, 34% Agreed, and 18% Strongly Agreed with a mean score of 3.22) show that the majority of the teachers believed that extra-curricular activities increases the educational problems of students with learning disability.

The participants' responded to the statement # 8 (1% Strongly Disagreed, 25% Disagreed, 10% Neutral, 44% Agreed, and 20% Strongly Agreed with a mean score of 3.57) show that the majority of the teachers tried to maintain self-esteem of students with learning disability.

The participants' responded to the statement # 9 (Strongly Disagreed 4%, Disagreed 26%, Neutral 17%, Agreed 37%, and Strongly Agreed 16% with a mean score of 3.55) show that majority of the teachers believed that teachers can manage destructive behavior of children with learning disability through involving them in classroom activities.

The participants' responded to the statement # 10 (1% Strongly Disagreed, 25% Disagreed, 15% Neutral, 35% Agreed, and 24% Strongly Agreed with a mean score of 3.45) show that the majority of the teachers always consulted head teachers about educational problems of children with learning disability.

The participants' responded to the statement # 11 (1% Strongly Disagreed, 30% Disagreed, 12% Neutral, 35% Agreed, and 21% Strongly Agreed with a mean score of 3.45) show that majority of the teachers always discussed educational plans with parents to overcome educational problems of students with learning disability. However, the response rate

of 30% to Disagree cannot be ignored as it may produce a negative impact for achieving the goal of “Education for All”.

The participants responded to the statement # 12 (Strongly Disagreed 2%, Disagreed 27%, Neutral 14%, Agreed 37%, and Strongly Agreed 20% with a mean score of 3.42) show that the majority of the teachers felt that parents of children with learning disabilities always showed cooperative attitude.

The participants’ responded to the statement # 13 (6% Strongly Disagreed, 23% Disagreed, 13% Neutral, 38% Agreed, and 20% Strongly Agreed with a mean score of 3.42) show that the majority of the teachers believed that children with learning disability should be taught in mainstream schools. It is an encouraging response rate for inclusive education.

The participants’ responded to the statement # 14 (7% Strongly Disagreed, 17% Disagreed, 17% Neutral, 43% Agreed, and 16% Strongly Agreed with a mean score of 3.41) show that majority of the teachers needed more training in order to appropriately teach students with learning disabilities.

A correlation between the participants’ knowledge of LDs and Attitudes towards the teaching of children with LDs is shown in Table 3.

Table 3 Correlation between Knowledge and Attitudes of the Participants			
		Knowledge of LDs	Attitude towards Teaching of Children with LDs
Attitude towards Teaching of Children with SLDs	Pearson Correlation Coefficient	.709	1
	Sig. (2-tailed)	.000	
	N	150	150
Knowledge of SLDs	Pearson Correlation Coefficient	1	.709
	Sig. (2-tailed)		.000
	N	150	150

In Table 3, the Pearson correlation coefficient equals .709 with Sig. (2-tailed) < 0.001 indicating a strong relationship between knowledge of SLDs and Attitudes towards the teaching of children with SLDs. The results indicate that the participants' attitude is strongly influenced by their level of awareness. It allows driving a conclusion that the attitude & knowledge of SLDs has a positive correlation.

A correlation between the male and female participants' attitudes towards the teaching of children with LDs is shown in Table 4.

Table 4: Difference between Male/Female Participants' Attitude towards the Teaching of Children with LDs									
Male Participants' Attitude				Female Participants' Attitude			95% CI for Mean Difference	t	df
No.	Mean	St. Dev		No.	Mean	St. Dev			
70	49.97	9.30		80	48.37	8.78	- 1.32, 4.51	1.08	148

The homogeneity of variance between the participants' attitude towards the teaching of children with LDs was calculated through an "Independent Samples t-test" using "Levene's test for Equality of Variances". Table 4 shows a mean difference of 1.59 and St. Dev. difference of 0.52 between Male and Female participants' attitude (Mean = 49.97, St. Dev. = 9.30 for male participants and Mean = 48.37, St. Dev = 8.78 for female). Similarly, $t(148) = 1.08$, $p = .31$ (two-tailed) and 95% CI for Mean Difference = - 1.32 to 4.51. The results reveal homogeneity of variance between the attitudes of male and female participants towards the teaching of children with LDs.); hence can be concluded that gender did not create any difference in the participants' attitudes towards the teaching of children with SLDs.

A correlation between the attitudes of the participants towards the teaching of children with LDs according to their years of experience is shown in Table 5.

Table 5 Correlation between the Attitude of Participants towards the Teaching of LDs their Job Experience				
Scores	Sum of Squares	df	Mean Scores	F
Within Groups	11113.42	145	76.64	
Between Groups	1034.41	4	258.60	3.37
Total	12147.84	149		

The correlation between the attitudes of participants towards the teaching of children with LDs according to their years of experience is calculated using a “One-Way Between-Groups Analysis of Variance (ANOVA)”. Although the real difference of the mean scores between the groups is relatively small, but the statistical results showed that with $p < .05$ the participants’ attitudes towards the teaching of children with LDs varied significantly according to their years of experience; i.e. $F(4, 145) = 3.37$; showing a positive relationship between experience and attitude.

The data presented also shows that the job experience creates a significant impact on the attitudes of participants towards the teaching of children with LDs. The Mean Scores confirm that the participants with greater experience (21-25 years) are more positive towards the teaching of children with LDs compared to others.

A correlation between the participants’ attitude towards the teaching of children with LDs according to their qualifications is shown in Table 6.

Table 6: Correlation between the Participants’ Attitude towards the Teaching of Children with LDs and their Qualifications				
	Sum of Squares	df	Mean Scores	F
Within Groups	11640.08	147	79.18	
Between	507.76	2	253.88	3.21

Groups				
Total	12147.84	149		

* $p < 0.05$

The correlation between the attitudes of participants towards the teaching of children with LDs according to their qualifications is calculated using a “One-Way Between-Groups Analysis of Variance (ANOVA)”. Although the real difference of the mean scores between the groups is relatively small, but the statistical results shown that with $p < 0.05$ the participants’ attitude towards the teaching of children with LDs varied significantly according to their qualification; i.e. $F(2, 147) = 3.20$; showing a positive correlation between attitude and qualification.

A Post-hoc Comparison with respect to the participants’ qualification is shown that the mean differences 8.85 and -8.85 are noteworthy at the 0.05 level. It shows that the participants with higher qualifications, like MA, MSc, or MEd or above, has more positive attitudes towards the teaching of children with LDs than others; confirming the results shown in Table 8.

4. DISCUSSION

Lembo (1971) says, 'While there are many complex factors, physical, psychological, economic and sociological, which account for each child's school performance, the basic cause of failure is the schooling process itself. Students do not enter school as failures; when students 'fail' it is the practices which teachers and administrators individually and collectively employ that are at fault'... (and) ... 'unless the classroom teacher's policies and practices are viewed as the most significant conditions in determining the direction and quality of classroom learning, and unless attempts at improving classroom learning focus on the formulation of more effective teaching policies and practices, there will be no significant reduction in the number of students who year after year become alienated from the educational process'.

It is obvious from Lembo’s statement that teachers role is very important in achieving full educational and social integration of children within the school and society. This role becomes more critical when children with specific learning disabilities are competing for better grades with normal children. It demands for teachers who not only have proper knowledge to

recognizing students learning difficulties, but also able to demonstrate appropriate attitude to teach children with learning disabilities (Gandhimathi, 2010).

Realizing the importance of teachers' role, this study has tried to investigate the knowledge and attitude of public sector mainstream elementary schools teachers' towards the teaching of children with learning disabilities. The study believes that if the learning difficulties of children studying in mainstream schools are unnoticed or ignored, the hidden sufferings of children will continue to grow. The study also believes that the outcome of this study would be useful for developing strategies to offer better services to children with learning disabilities for achieving the Education for All, the Millennium Development Goals (MDGs), and Punjab Inclusive Education Projects.

As regard the teachers' knowledge about learning difficulties, the participants' responses to the seven (7) statements about Dyslexia (45% Agreed, and 16% Strongly agreed), nine (9) statements about Dysgraphia (47% Agreed, and 14% Strongly Agreed) and Nine (9) statements about Dyscalculia (Agreed 45%, and Strongly Agreed 16%) depict that almost 60% of the participants had fair scores of knowledge about specific learning difficulties (definition, types, causes, and characteristics of students with specific learning difficulties). The participants with high scores may have acquired this knowledge from in-service training workshops or through their personal efforts. This finding is supported by the results of Jeromey (2007), Kelvan et al. (2012), and Dapudong (2014) who have revealed that the teachers have a good or moderate knowledge about the nature of learning disability. But, the remaining 40% participants with low scores exhibited partial knowledge of specific learning disabilities which means that they are not properly trained to teach the children with specific learning disabilities. This finding supports the claim of Robuck (2009) who alleged that general education teachers usually have very little knowledge about learning disabilities. Similarly, Fatafi (2007) has also shown similar kind of apprehensions that teachers in mainstream schools don't have an appropriate awareness of the cause and nature of learning disability.

Teachers' attitude towards the children with SLDs studying in regular schools is considered a central point to their inclusion in educational

process (32, 24). Teacher's attitude towards students' disabilities can influence their way of treating them. As regard the participants' attitude towards teaching children with SLDs, the current study depicted that the majority of the participants had positive attitude towards teaching the children with specific learning difficulties. For example, 68% of the participants gave more reading opportunities to those children who were having reading problems; 55% teachers designed special assignments for children with learning disability to improve their performance; 67% encouraged students with learning disability to participate in extra-curricular activities; 56% teachers always discussed educational plans with parents to overcome educational problems of students with learning disability; and 64% teachers tried to maintain self-esteem of students with learning disability.

The study found a positive correlation between the participants' knowledge of SLDs and Attitudes towards the teaching of children with LDs. It is evident from the Pearson correlation coefficient equals .709 with Sig. (2-tailed) < 0.001. The results revealed homogeneity of variance between the attitudes of male and female participants towards the teaching of children with LDs which is evident from the results of an "Independent Samples t-test" using "Levene's test for Equality of Variances" show a mean difference of 1.59 and St. Dev. difference of 0.52 between Male and Female participants' attitude. Similarly, $t(148) = 1.08$, $p = .31$ (two-tailed) and 95% CI for Mean Difference = - 1.32 to 4.51.

These findings are in consistent with the of Kelvan et.al., (2012) finding who found that there are significant differences between gender and years of teaching experience of teachers with the knowledge of the etiology learning disabilities(22) .

The study also found a positive correlation between the attitudes of the participants towards the teaching of children with SLDs with their years of experience. The results of "One-Way Between-Groups Analysis of Variance (ANOVA)" show that with $p < .05$ the participants' attitudes towards the teaching of children with LDs varied significantly according to their years of experience; i.e. $F(4, 145) = 3.37$. The Post-hoc Comparisons shows that the job experience created a significant impact on the attitudes of participants towards the teaching of children with LDs. The Mean Scores confirm that the participants with greater experience

(21-25 years) were more positive towards the teaching of children with LDs comparing to others. These findings were contradict with Essa and El-Zeftawy (2015) and Chopra (2008) who found no significant correlation was observed between the teaching experience and the teachers' attitude towards learning difficulties.

The study also found a positive correlation between the participants' attitude towards the teaching of children with SLDs and their qualifications. The results of "One-Way Between-Groups Analysis of Variance (ANOVA)" show that with $p < 0.05$ the participants' attitude towards the teaching of children with LDs varied significantly according to their qualification; i.e. $F(2, 147) = 3.20$; showing a positive correlation between attitude and qualification. A Post-hoc Comparison with respect to the participants' qualification shows that the participants with higher qualifications like MA, MSc, or MEd or above, has more positive attitudes towards the teaching of children with LDs than others.

Children with lack of age-appropriate social skills which disrupts their social functioning; Because of the limited effectiveness of classroom mainstreaming and social skills training for these children, it is important to explore alternative opportunities for social skill acquisition. Participation in social activities is positively related to children's social adjustment, but little is known about the benefits of activity participation for children with intellectual and specific learning disabilities.

Participate in extracurricular activities are generally considered benefit beneficial for children with intellectual disability and specific learning disabilities (Brooks, 2013; Brooks et. al. 2015). Lewis (2004) recommended that well-built, developmentally appropriate structured activities for academic and social profits of the children and adolescents. In contrast, 52% participants responded that "extracurricular activities increased the educational problems of students with learning disability". These responses contradict with Brooks, B. A. (2013) who found that greater participation in unstructured extracurricular activities was particularly beneficial for children with Intellectual Disabilities. It raises a serious question about the effectiveness of extracurricular activities and demands that the involvement of children with specific learning disabilities in extracurricular activities as promoting both academic and social development should be thoroughly explored.

Dignity, worth and the equal rights of all members of the human family have been recognized the most important pillars of freedom, justice and peace in the world (UN 1948). In 2000, at the World Education Forum in Dakar, Senegal, 164 governments re-affirm the vision of the World Declaration on Education for All (Jomtien, 1990) that all children, young people and adults have the human right to get education that meet their basic learning needs. To make the “right to education for all” a reality, it has been advocated that all learners have access to quality education that meets their basic learning needs and enriches lives. Inclusion, teaching of children with disabilities in mainstream classrooms, has certainly been one of the major topics in education for the last two decades. Inclusion largely depends on teachers’ attitudes towards children with learning disabilities. It is extremely positive sign that majority of the participants believed that children with learning disability should be taught in mainstream schools.

Teachers play a key role in providing education that is inclusive for all (Vaillant, 2011). Well-prepared, trained, and motivated teachers impact on the participation and achievement of all students – but can be particularly detrimental to the education of children from children with disabilities who need extra encouragement or assistance to reach their educational potential (Lewis and Bagree, 2013). 59% teachers needed more training in order to appropriately teach students with learning disabilities. It clearly shows the need of further in-service training for teachers to promote inclusive education. The government should develop new strategies and plan of action to provide more in-service trainings to bring a positive change in the school culture. In-service training can help them to handle educational problems of children with learning disabilities. Recommendations for further in-service training are also reported in (Destefano, Shriner, & Lloyd, 2001; Farooq, 2012).

Fundamental principle of Inclusive Education is that all children should have appropriate provisions that could fulfill their needs. 64% responded that in elementary schools of Sialkot there were not enough facilities to meet the needs of the children with learning disability. 62% felt that assistant teachers should be provided in classes having students with learning disability. It seems that teachers having children with learning disabilities are over burdened. The presence of assistant teacher the

children with learning disabilities could get more attention. Lack of resources is an alarming indicator for the Punjab Inclusive Education Project which aims to provide equal opportunities of quality education to every school going age children without any discrimination.

5. CONCLUSION AND RECOMMENDATIONS

Realizing the importance of teachers' role, this study has tried to investigate the knowledge and attitude of public sector mainstream elementary schools teachers' towards the teaching of children with SLDs. As regard the teachers' knowledge about learning difficulties, the study found that the majority of the participants had fair knowledge specific learning difficulties. They also have positive attitude toward teaching the children with specific learning difficulties. However, the participants with low scores needed further training to teach children with specific learning difficulties more effectively.

The study found a positive correlation between the participants' knowledge of SLDs and attitudes towards the teaching of children with LDs; no significant difference is observed in male and female attitude. Similarly, a positive correlation is found between their attitudes and their years of experience. The participants with greater experience (21-25 years) were more positive towards the teaching of children with LDs comparing to others. A positive correlation between the participants' attitude and their qualifications were observed. The participants with higher qualifications like MA, MSc, or MEd or above, has more positive attitudes towards the teaching of children with LDs than others.

Participation in extracurricular activities is generally considered benefit beneficial for children with intellectual disability and specific learning disabilities. In contrast, the majority of the participants considered that extracurricular activities increased the educational problems of students with learning disability. These responses raise a serious question about the effectiveness of extracurricular activities and demands for a serious research. The study also finds that in elementary schools in Sialkot there are not enough facilities to meet the needs of the children with learning disability. Also assistant teachers are not provided in classes having students with learning disability. Lack of resources is an alarming indicator for the Punjab government.

Although, majority of the participants have good knowledge of SLDs and positive attitude and believed that children with learning disability should be taught in mainstream schools, but the study strongly recommends that more in-service training opportunities should be provided to upgrade teachers' knowledge and teaching practices. In order to provide equal opportunities of quality education to every school going age child without any discrimination, the study strongly recommends that the Punjab government must provide the necessary resources to meet the needs of the children with SLDs. The study also recommends that assistant teacher should be provided in classes where children with SLDs are studying. Due to the presence of assistant teacher, the children with learning disabilities could get proper attention. The study recommends that the outcome of this study would be useful for developing strategies to offer better services to children with learning disabilities for achieving the Education for All, the Millennium Development Goals (MDGs), and Punjab Inclusive Education Projects.

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A COMPARATIVE STUDY OF PERCEIVED RESPONSIBILITIES OF PSYCHOLOGISTS FOR CHILDREN WITH SPECIAL NEEDS

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ABSTRACT

Psychologists working in special schools collaborate with teacher specialized in special education for the rehabilitation of special children. The purpose of the study was to know about the perception of psychologists and teachers for special children have about the responsibilities, a psychologist should bear while dealing with special children in Punjab, Pakistan. The study also compared their perceptions. A scale was developed by the researchers to identify the perceived responsibilities of psychologists. The scale consisted of 30 items covering seven subscales. The subscales include assessment of the students, interpretation of students' assessment, providing the intervention to special students, offer consultation and required training, development of different program for a child's development; development of the school psychology program for services; involvement in professional practice and the development; and communication with the parents and special teacher and relationship building skills. The sample was selected by using purposive sampling technique. The sample of the study comprised on 70 psychologists working in special schools and 100 teachers specialized in special education from seven districts of Punjab Province, Pakistan. To analyze the data, Independent sample t-test was applied to get a comparison between the perceptions of psychologists and special education teachers. The findings exposed that both the psychologists working in special schools and special education teachers have a strong agreement in some of the areas including assessment of special children, interpretation of assessment, communicating the interpreted report and relationship building skills. The study also found that the residential areas with which the respondents belong also influence their perceptions. But the factors of income of respondents, their age and the type of disability, they are serving had not impact on their perceptions.

Keywords: Psychologists, Special education teacher, Responsibilities of psychologists, School psychologists, Children with special needs.

1. INTRODUCTION

Psychologists can play a very important role in the development of children with special needs. These children face many psychological problems like emotional disturbance, behavioral problems, aggression, anger and many other problems (Kirk, Gallagher, & Anestisia, 2003). These all problems interfere with their academic, social and emotional life and the children cannot find their full potential. Therefore, psychologists can play a very important role while working in schools of special education where these children with special needs get educated and learn other social and vocational skills. They perform their duties by working in collaboration with the teachers and parents of the children with special needs and can provide many services directly or indirectly to manage the problems of these children.

By the nature of their work, school psychologists can play a very important role in serving the students with special needs. They can provide counseling to students in various areas such as academic, career, personal, and social. As the school counselors have a unique role in the problem-solving of children from every aspect in schools, there should be different training and educational programs for the school psychologists in schools. They also play very effective role in the transition planning for children with special needs (American School Counselor Association [ASCA], 2005).

School psychologists are considered as the experts of mental health of school going children. Despite the traditional role of the school psychologists, Sheridan and Gutkin (2000) few psychologists as experts on issues regarding learning and schools. It is the moral responsibility of the school psychologists to cater the problems of students other than assessment and diagnosis of the children. They should be involved in addressing the social and human ills and in reducing the effects of these ills on children (New Nouveau Brunswick, 2001).

According to Reschly & Yesseldyke (2002) school psychologists are trained in many areas like child development, school and family systems, cognition, academic assessment as well as behavioral assessment and intervention and they have a very important role in collaboration of school and family of the children with special needs. School psychologists can

include families in school issues related to children and provide them guidance regarding the problems of their children. In this regard, psychologist involves families in children's day to day schooling and also provides consultation and education to the staff of the school to make them aware of the importance of involving families. The principals of special schools and the special teachers working in special schools undervalue the efforts and services which school psychologists provide to families of special children and to schools working for such children. These principles and teachers also think that school psychologists are only supposed to diagnose the children and their placement in schools. Because of this attitude of school principals and teachers, they cannot use the full potential of school psychologists in creating a collaborative environment in their schools.

There is a continuous research regarding the possible services of school psychologists. The education experts claim that the major role of school psychologists is in the area of assessment for children in schools. According to Gilman and Gabriel (2004) the continuing debate regarding the services and responsibilities of school psychologists expands the scope of their profession. The provision of counseling services by the school psychologists to individual or groups of individuals were also in progress (Gilman & Gabriel, 2004).

According to Lecapitaine (2000) school psychologists can play a very important role in the diagnosis of at-risk students. Previously, the role of school psychology was confined to the testing and dealing with the students with special needs. Now a day, the functions the school psychologists perform include different services like dealing with the families of the children and communities.

A research study was conducted by Hall (2002) about the time school psychologists spend on different activities. The results of the research showed amounts of time school psychologists spend in each area, i.e. assessment activities (46%), counseling services (16%), intervention plans (13%), counseling of students (8%), school meetings (7%), supervising all the activities of schools (3%), in-serving (2%), conducting research (1%), provide training for parents (1%), and other activities (3%).

Sometimes school counselors work directly with the students, but mostly they guide the class teachers about the behavioral problems of the students. They guide the teachers regarding different strategies which they can use in their classrooms when students have behavioral, emotional and social problems. So, in this way school psychologists work with the students indirectly (Marlow, Bloss, & Bloss, 2000). School psychologists also play a very important role in the crisis intervention plan. They have detailed discussion with the students and other persons involved in crisis incidents to get the in-depth input from these people (Carroll, Frew, Smith, Fitcher, Ladkin, Morey, & Price, 2007).

2. METHODOLOGY

2.1 Objectives of the study

The study intended to:

1. Highlight the perception of psychologists about their responsibilities for special children.
2. Find out the perception of teachers of special children about the responsibilities of psychologists to children with special needs.
3. Compare the perceptions of psychologists and teachers of special education to underline the responsibilities of psychologists in special schools.
4. Investigate the effect of income, age, area of specialization, type of disability, they serve, on the perception of psychologists.
5. Know about the most favored services of psychologists to children with special needs.

2.2 Sample

The sample comprised of 100 special education teachers and 70 psychologists working in special schools of Punjab, Pakistan. Total psychologists working in special schools of Punjab are 212 and special education teachers are 310; the researchers accessed 70 and 100 special education teachers which are 33% and 32% respectively of the total population. The sample was selected by using Purposive Sampling Technique, which is used to get all possible cases that fit particular criteria, using various methods (Neuman, 2005).

2.3 Instrument

A scale was developed with the help of previous literature on the services psychologists deliver to special children and their responsibilities in special education schools. The scale was consisted of 30 items divided into 7 subscales. These subscales were entitled as assessment and interpretation (6 items); direct intervention for students (4 items); consultation and training (7 items); program development (4 items); school psychology program (3 items); professional practice and development (3 items); and communication and relationship skills (3 items). Z-scores were calculated for each subscale. The participants were required to respond to 5 points Likert scale in which 1=‘strongly disagree’, 2= ‘disagree’, 3= ‘neutral’, 4= ‘agree’ and 5= ‘strongly agree’.

2.4 Research Design

Survey research design was used in this study. Survey research design is a valuable method to explore about the opinions, thinking and ideas of people about a phenomena. (Penwarden, 2014).

2.5 Procedure

The researcher used a self-developed scale to collect data from psychologists working in special schools and teachers dealing with special children, about the responsibilities, a psychologist should perform to manage special children. The scale was consisted of 30 items, divided into 7 subscales. The researcher also conducted a pilot study on 30 psychologists and special education teachers within Lahore. For the field study, the data were collected for the districts of the Punjab. The researcher used Pakistan post service to collect data from schools constituted in seven different districts of Punjab Province, Pakistan. Cronbach Alpha for the field study was 0.943. After collecting data, it was analyzed by using SPSS. Independent-sample t-test was used to find the difference in the perception of psychologists working in special schools and special teachers about the supposed responsibilities a psychologist should perform to deal with special children. The same test was used to expose the effect of residential area in which respondents live, on their perception. The test of One-way analysis of variance was used to reveal the significant differences in perception of the respondents because of

their different levels of income, their age and the type of disability they served.

3. RESULTS

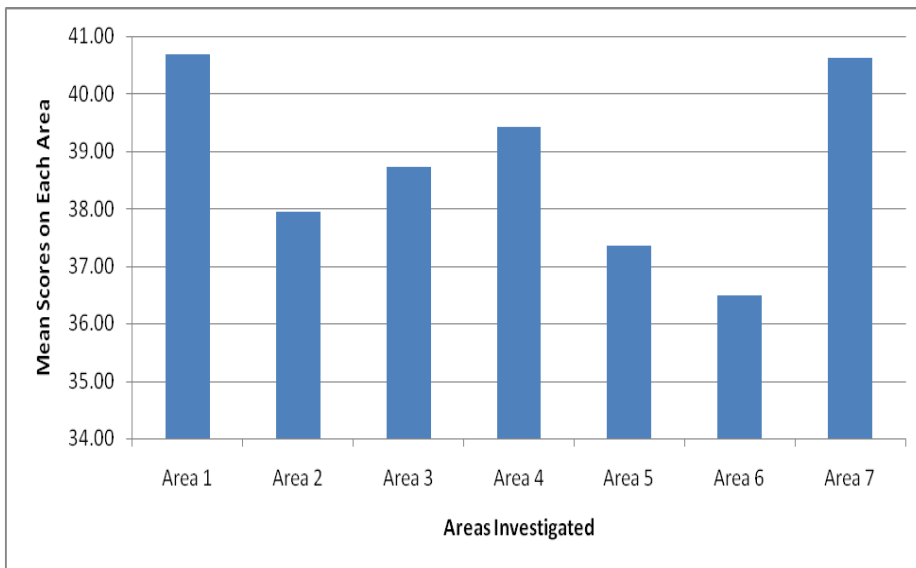
Table 1
Comparison of psychologists and special education teachers

Subscales	M	SD	Sig.	t	95% CI LB-UB
Assessment and evaluation					
Psychologists	43.43	5.208	0.00	4.619	2.679 - 6.678
Special education teacher	38.75	7.264			
Direct intervention to students					
Psychologists	40.25	5.792	0.00	3.620	1.784 - 6.066
Special education teachers	36.33	7.666			
Consultation and Training					
Psychologists	42.14	5.209	0.00	5.503	3.728 - 7.900
Special education teachers	36.33	7.687			
Program Development					
Psychologists	43.11	6.056	0.00	5.399	3.985 – 8.579
Special education teachers	36.83	8.309			
School psychology program					
Psychologists	41.19	6.928	0.00	4.804	3.843 – 9.205
Special education teachers	34.67	9.767			

Professional practice and development					
Psychologists	39.95	7.750	0.00	4.460	3.281 – 8.491
Special education teachers	34.07	8.934			
Communication and relationship skills					
Psychologists	44.19	5.834	0.00	5.016	3.673 – 8.441
Special education teachers	38.13	8.842			

The analysis showed that there is a significant difference in perceptions of psychologists and special education teachers about the responsibilities of psychologists in special schools. It appears that psychologists are more in favor of the specified responsibilities in special schools

Graph 1: Mean scores on seven subscales



The area of assessment of special students, interpretation of assessment, communication of the reports and relationship building skills emerged as

the most important areas in which psychologists should serve children with special needs.

Table 2
Comparison of respondents on the basis of area

Subscales	M	SD	Sig.	t	95% CI LB-UB
Assessment and evaluation					
Rural	41.50	5.676	.004	2.954	1.103-5.570
Urban	38.16	7.471			
Direct intervention to students					
Rural	37.89	6.990	.444	.767	-1.498-3.399
Urban	36.94	6.946			
Consultation and Training					
Rural	38.83	7.395	.234	1.196	-1.004-4.077
Urban	37.29	6.933			
Program Development					
Rural	40.44	6.700	.003	3.007	1.358-6.572
Urban	36.48	8.614			
School psychology program					
Rural	38.74	8.905	.003	2.981	1.614-7.976
Urban	33.95	9.346			
Professional practice and development					
Rural	36.63	9.261	.567	.575	-2.235-4.066

Urban	35.71	8.416			
Communication and relationship skills					
Rural	41.00	8.661	.189	1.321	-.937-4.706
Urban	39.12	6.728			

The analysis showed that there is a significant difference in the perceptions of respondents on the basis of areas they belong. It appears that respondents from rural areas favored three areas i.e. “assessment and interpretation”, “Program development”, and “School Psychology Program”.

Table 3
Analysis of demographic variables

Demographics	SS	df	MS	F	Sig.
Income					
Between Groups	3183.028	4	795.757	2.278	.064
Within Groups	53108.335	152	349.397		
Age					
Between Groups	2380.326	4	594.082	1.627	.171
Within Groups	53774.489	147	365.813		
Type of disability					
Between Groups	3776.852	6	629.475	1.757	.111
Within Groups	57667.433	161	358.183		

The analysis showed that there is no significant difference in the perceptions of respondents on the basis of income, age, and the type of disability they served in special schools.

Table 4
Underlined responsibilities of psychologists

Sr #	Subscale	Responsibilities
1	Assessment and interpretation	<ul style="list-style-type: none"> i. The early identification of the problems students' face in learning and adjustment. ii. Assessment align with existing professional standards. iii. assessments with consideration of the characteristics of the students iv. identification of factors in the learning environment that may affect the student v. integrate data from assessment procedures and develop hypotheses
2	Communication and relationship skills	<ul style="list-style-type: none"> i. Communication of knowledge and ideas orally to individuals and groups. ii. Communication of knowledge and ideas in writing. iii. Maintenance of effective interpersonal relationships and communication in the professional setting.

After the comparison of the perceptions of psychologists and special education teachers the study underlined two areas in which psychologists should serve special children in special schools. The first area is the assessment and interpretation and second, communication and relationship skills

5. CONCLUSION

The present study intended to compare the perceptions of psychologists and special education teachers regarding responsibilities of psychologists in special schools. It was found that psychologists are more in favor of their perceived responsibilities in special schools. The study further underlined two areas, "assessment and interpretation" and "communication and relationship skills" as most favored areas by respondents. It was also concluded that the respondents from rural areas were more in favor of three areas i.e. "Assessment and interpretation", "Program development" and "School psychology program". The levels of income, the age of respondents and the type of disability, these

respondents served, did not affect their perception about the responsibilities of psychologists.

4. DISCUSSION

As evident from the present study that both psychologists and teachers in special schools perceived the most important responsibilities of psychologists are in the area of assessment and interpretation. Previous research also supported this finding. As concluded by a study conducted by Hall (2002), that the amount of time school psychologists spend in different area in special schools, i.e. assessment activities (46%), counseling services (16%), interventions plans (13%), counseling of students (8%), school meetings (7%), supervising all the activities of schools (3%), in-serving (2%), conducting research (1%), provide training for parents (1%), and other activities (3%). Similarly, Lacayo, Sherwood, and Morris (1981), also found that assessment, inclusive of test giving, protocol scoring, and report writing, took 40% of the psychologists' day. Another study showed the importance of the area of assessment to psychologists. Reschly (2000), found that psychologists typically spend 50% to 55% of their time on psycho educational assessment.

The other area which both special education teachers and psychologists highly favored is "communication and relationship". It means that psychologist communicates the information orally and in writing to teachers, parents and other relevant staff of children with special needs. As cited in Koch (2001), that preparation of psychological reports is also an important responsibility of school psychologists. The psychologist will need to prepare an in-depth holistic personal profile on the child outlining the child's emerging skills and strengths across all domains, i.e. cognitive, self-adaptive, social, and emotional and the type of support required by the child in terms of resource both technical and personal to optimize the child's opportunity for learning in an inclusive ordinary school setting.

Following are the important suggestions:

1. There should be clear measures for the responsibilities of psychologists working in special schools.
2. School administrators should provide the specific job descriptions to psychologists working in their schools.

3. Special education teacher and psychologists should work in collaboration for the rehabilitation of persons with disabilities.

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ROLE OF COMMUNITY SOCIAL WORK ACTIVITIES IN ERADICATION OF POLIO: LESSONS FOR PAKISTAN

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ABSTRACT

People are suffering more and more physical and psychological illnesses but on the contrary the resources required to deal with their problems are decreasing predominantly, in less-developed parts of the world. In such a critical situation, a social worker in community health setting can play an important role to curtail the melancholies of common and especially poor people, through his constructive, dynamic and helpful role. Polio is in-curable so far and can only be prevented by vaccination. Eradication of an epidemic like Polio is such a task which cannot be achieved and sustained unless there is also a strong and sustained Immunization campaign. Role of social work activities is very important in such a campaign. Pakistan and Afghanistan are the only nations internationally that have reported Wild Polio Virus cases constantly. Many countries have accomplished this task by effective deployment of indigenously-developed and tailor-made social work activities. Pakistan needs to learn lessons from these success stories. Although, this paper is focused on these “social work activities”, there are various other support activities like “cold chain management, training of health workers, logistic support, quality control and supportive supervision” from Governments and NGOs are also equally necessary to achieve this difficult yet very important task.

Key Words: Social Work, Social Mobilization, Polio Eradication, Pakistan, Lesson, Community.

1. INTRODUCTION

Polio, also known as ‘poliomyelitis’ and ‘infantile paralysis’, is an extremely infectious viral disease, which mainly affects children. Poliovirus is usually spread from person to person mainly through the faecal-oral route. It may also be spread by a common vehicle (e.g. contaminated water or food). Poliomyelitis virus grows in the intestine and from there it attacks the nervous system and cause paralysis. Polio is in-curable so far and can only be prevented by vaccination. There are two types of vaccine use to combat polio. First is The Salk vaccine, or inactivated poliovirus vaccine (IPV) given by ‘injection’. The second type of vaccine is oral polio vaccine (OPV). These vaccines prompt immunity to polio and as a result preventing transmission of polio virus.

Pakistan, Afghanistan and Nigeria are three states in the world categorized “endemic” by the Global Polio Eradication Initiative (GPEI). In the year 2014, 305 cases of wild polio virus were reported from 43 districts of Pakistan, comprising 86% of worldwide reported cases. Most of the reported cases are constantly being detected from same known reservoir areas like Federally Administered Tribal Areas (FATA), Peshawar and Southern/Central KPK, Karachi in Sindh province and Quetta belt in Baluchistan. There were also some detected cases from districts in Northern Sindh, Eastern Baluchistan and Southern Punjab. The center of this epidemic was in FATA, with cities like Peshawar and Karachi increasing the danger through movement of high-risk, traveling people.

2. METHODOLOGY

Qualitative assessments based on two successful polio eradication case studies i.e. India and Angola. Analysis of indigenously developed techniques adopted by community social workers of both countries and their potential practice in Pakistan is the center of these assessments. This study has been done using digital library books, papers, research reports and data available on internet.

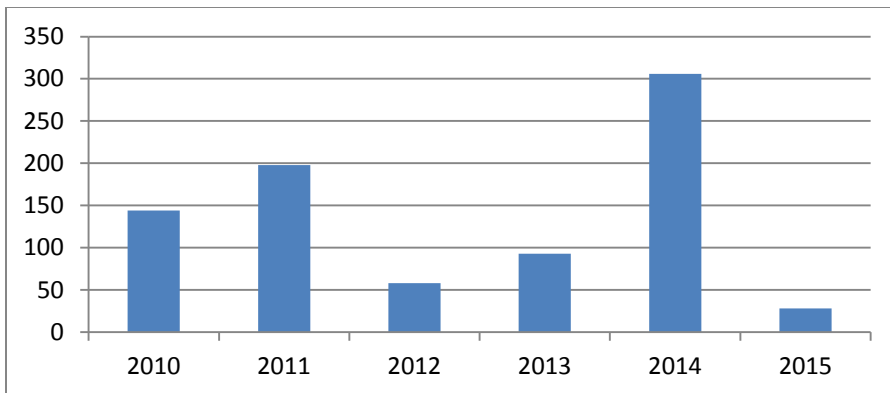


Figure 1 wild polio cases in Pakistan. Source: World Health Organization data available at <https://extranet.who.int/polis/public/CaseCount.aspx>

S.No	Province	District
1	Sindh	Baldia
2	Sindh	Gadap
3	Sindh	G. Iqbal
4	KPK	Peshawar
5	KPK	Bannu
6	Balochistan	Quetta
7	Balochistan	Pishin
8	Balochistan	Kabdulah
9	Fata	Khyber Agency
10	Fata	Wazir-north
11	Fata	Wazir-south

Figure 2 List of Pakistan's remaining reservoir districts (Source): National Emergency Action Plan for Polio Eradication (NEAP 2015-16)

Globally, Pakistan stands at very dangerous stage. Nigeria, the single endemic state in Africa has not reported any WPV case since 24th July 2014. The volatile eruptions after the WPV import into Middle East are immobile with no polio case for more than a year. In actual fact, Pakistan and Afghanistan are the only nations internationally that have reported WPV cases constantly. Furthermore, many of the polio cases from Afghanistan in 2015 are reported to be exported from Pakistan. The Emergency Committee under the International Health Regulations (IHR) has stated the global spread of polio virus as a “Public Health Emergency of International Concern (PHEIC)” and endorsed for all the Pakistan-origin travelers to be vaccinated against polio virus one month to one year

prior to travel and must possess an international vaccination certificate as a proof.

To eradicate polio virus in Pakistan, continual efforts from last twenty-five years have been made. These efforts include mobilization and training of hundreds of thousands of volunteers, social mobilizers and health workers, vaccination of kids in formerly untouched families in abandoned populations and improvement the overall provision of basic health services in the country. National Emergency Action Plan (NEAP 2015) of Pakistan is targeting to eradicate polio virus by the end of 2016. The officials in Islamabad have renewed their commitment to lead and oversee the eradication struggle, employing a nation-wide approach that includes actors from all echelons of government as well as domestic and global stakeholders.

To accomplish this final target, numerous recent strategic moves are dedicated to prevention of the spread of the polio virus through detection and vaccination of kids who are constantly neglected in the polio prevention campaigns. The official polio communication strategy of Pakistani government has also undergone a major shift by placing frontline social workers at the focus of the polio eradication efforts. Past experiences have proved that the key to eradication of polio depends on their achievement at the doorsteps of houses and in the societies.

3. FINDINGS

3.1 Social Mobilization- a Primary Method of Social Work

Social Mobilization, according to definition of UNICEF is:

“a wide-ranging effort to involve people in accomplishing a particular development or health objective through self-sufficient efforts, those that rely upon their own resources. It encompasses all important sections of population: legislators and politicians, the mass media, administrators and professionals, specialized organizations, religious leaders, NGOs, and members of society”.

It is a strategic and devolved method that seeks to accommodate transformation through a variety of factors involved in interconnected and balanced efforts. It embraces the fondled desires of the individuals, grips

the important value of “community participation”, and tries to “empower the general public” to act. Recruitment the necessary resources, propagation of information personalized to variable audiences, generation of intersectional support, and encouragement of inter-professional associations are part of the process.

After several years of involvement in polio eradication, an agreement has developed that “reaching high-risk and unconvinced population calls for penetrating and wide-ranging social mobilization efforts and that the role of NGOs, mostly overlooked in earlier days of Global Polio Eradication Initiative (GPEI), is critically significant”. “Underserved populations” are expected to react “positively” to popular organizations as these organizations have a good record of helping in community desires, their “outreach workers” belong to the same populations, and they involve “respected community leaders as center of their social mobilization efforts”.

The Indian, Angolan and Ethiopian success stories— for being polio-free since 2008 are mainly credited to fruitful “social mobilization” struggles for reaching “underserved” communities. Indigenous, “research-oriented” plans such as incorporating religious leaders as spokesmen for vaccination, and have faith in nonprofessional workers to monitor child vaccination and neonatal tracking were significant. In-country Private Voluntary Organizations and popular Non-Governmental Organizations in harmonization with the government and other groups have played a key role in the accomplishment of these three nations. The key aspects of the project are its “variability of creative and tailor-made social mobilization efforts”.

3.2 Eradication of Polio through Social Work Methods: Lessons from India

India had been known as one of the hardest parts of the world to fight against endemic polio. In 2009, Wild Polio Virus (WPV) cases in India were 740, highest in the world. But in the first month of 2011, last case of WPV reported in India and in 2010 World Health Organization acknowledged India as polio-free. Afterwards India along with Angola and Ethiopia remained in the “three-year certification period of polio extermination”. Accreditation of WPV extermination is carried on region-

wise. A country can get the accreditation, conditional to nonexistence of WPV transmission in all states of the region for at least three successive years.

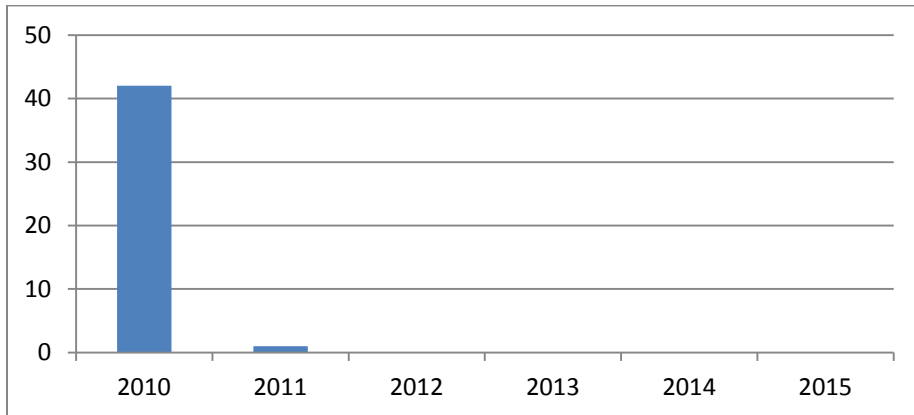


Figure 3 Wild Polio Virus Cases in India. Source: World Health Organization data available at <https://extranet.who.int/polis/public/CaseCount.aspx>

This extraordinary accomplishment is the outcome of years of painstaking efforts and commitment by the Indian Administration and the various social organizations in India that joined the fight of polio-eradication through their wide-ranging social mobilization ventures. According to Ogden, a Polio-Eradication officer of US-AID, this is “a triumph of coordination.” Primary Indian approach “to end transmission of WPV has been to rise the percentage of children who are completely vaccinated with Oral Polio Vaccine through both additional immunization campaigns and routine immunization (the standard childhood sequence of immunizations, including Oral Polio Vaccine) in high-risk parts of the country”.

The Community Social Workers adopt a range of tactically-associated “social mobilization activities” in their allocated zones and also joined “training sessions” organized by NGOs to develop their expertise:

Tracking: Community Social Workers monitor and follow the vaccination progress of all youngsters below five years of age in “high-risk areas” through records of local health system and Supplemental Immunization Activities. This strategy results into micro level coordination with regional Ministry of Health officials, public figures, and

Block Mobilization Coordinators to ascertain the best possible methods to grasp the un-immunized child population.

Visiting: Activities initiate with home visits to inform parents of un-immunized children about Oral Polio Vaccine and convince them to completely vaccinate their children. Community Social Workers first target people living far from stationary vaccination facilities, resistant in the last Supplemental Immunization Activity, and where a neonatal lives, and then children overdue on normal immunization schedule, and lastly families completely current on immunization. These visits offer an opportunity to collect more facts about hurdles to vaccination that they may not have hitherto unspoken. This information can be used to mold communications and interferences.

Visiting homes is the principal approach as a number of families might just want to know about “when and where immunization facilities will be set up” for the period of Supplemental Immunization Campaigns or how to benefit from routine vaccination. Or families are doubtful about the significance of polio vaccination but “might change their minds” when Community Social Workers deliver information on the importance and safety of Oral Polio Vaccine. Community Social Workers moderately “correct misinformation” and reassure families that OPV vaccines do not disturb “fertility”. They emphasize on importance of immediate immunization of infants against polio and that it is also safe to vaccinate the kids who are sick. If frequent visiting of a particular family visits does not work, they attempt other tactics such as fetching to the home the family’s neighbors and near-relatives who have vaccinated their kids. These “positive deviants” have demonstrated very good results. Community Social Workers also involve important personalities of society.

Engagement of “influencers”: Involvement of influential community members as “supporters for a cause has been an effective behavior change approach globally, many NGOs made it central to their social mobilization activities”.¹ In Islamic-majority localities, people have been mostly resilient to vaccinating their youngsters. They may have faith in that “Islam” as religion is in contradiction of vaccinations or an “*Imam*” (a Muslim Spiritual leader) “may have spoken out against polio vaccination”. In such cases, “top Islamic spiritual leaders who are engaged as associates

have taken action”. They do not openly challenge people who have perceived negative information; they deliver encouraging declarations in favor of polio vaccination from the podium or from megaphones of the “Mosque” and also inform people about venue and dates of vaccination campaigns. In religious gatherings called “*Ijtemas*”, held distinctly for male and female, “both male and female religious leaders use incitements from the Holy Books to emphasis upon the responsibility of parents to safeguard the health of their children”. Community Social Workers are frequently asked to communicate at religious gatherings and they are prepared to communicate publically. Several “*Imams*” also visit the non-cooperative families to advise them to vaccinate their kids.

Involvement of Social-groups: Community Social Workers interact to share knowledge with “women’s groups” and other “community-based groups” for Supplemental Immunization Activities and standard vaccination schedule and mention their help in dissemination of the information. Women Social Workers arrange “daytime” meetings of mothers to motivate them to vaccinate their kids and “male social workers or male influencers” arrange meetings of fathers when they come back from workplaces. Along with religious and community leaders, nearly everybody in the society has played a dynamic role in the fight against polio: old-style therapists; ration suppliers, who dispense food to the underprivileged; hairdressers; tea-shop proprietors; administration workers; brick-kiln possessors; local entrepreneurs; educators and students.

Collaboration with Educational Institutes and Students: Connecting with educators and pupils has stretched the scope of Community Social Workers’ work. They deliver classroom lectures to teach students about the significance of polio vaccination and normal standard vaccination of various diseases faced by their society. They motivate children to “share this information” with their family members and neighbors. They also motivate them to bring children less than 5 years of age to the immunization facilities in Supplemental Immunization campaigns. Community Social Workers promote school essay and art competitions on themes of polio virus. School educators support by organizing marches, including at madrasa (religious schools of Muslims). They also form “child brigades” who fetch families and kids to the immunization facilities during Supplemental Immunization campaigns, singing about vaccination,

wearing venture shirts, and waving ensigns. Involvement of youngsters as “mobilizers” is an interesting and effective way to enlarge exposure, train the “next generation”, and inculcate a sense of community service.

Involvement of Artistic Work: Some members of society have “artistic” aptitude and Community Social Workers contact them ahead of Supplemental Immunization campaigns to arrange “street theater”, “dancing and singing events”, and fine art displays that express polio themes. Community Social Workers themselves often put on “polio satires” and set up vaccination information stands in the course of carnivals or funfairs.

Widening the range: Some families and public leaders criticize polio-specific activities as they have several other medical and development requirements those have been overlooked. In reaction, Community Social Workers add the significance of routine vaccinations in their communications so that young population will also be secured against “measles” and other vaccine-avoidable child-borne diseases; the significance of “hand-washing” and improved hygiene; consuming “oral rehydration” treatment in the period of kids’ diarrheal periods; and ensuring that youngsters get adequate Vitamins in their nutrition and from food supplements accessible at health points.

Gain access to the un-accessible: Neonates and mobile populaces are the most challenging to access. However, NGOs have developed policies to make sure that they are involved in the vaccination campaigns. They put a lot of hard work to find these mobile populaces and make sure that their kids are vaccinated. Pastoralists visit villages and townships sporadically to sell their merchandises and get supplies; Community Social Workers work with well-aware informants who give time to time information of the people who have shifted from outside the locality or those that have come back. This setup provides an opportunity to the Community Social Workers to access them to list their kids for vaccination campaigns and make sure that they have vaccination cards issued by the government. Community Social Workers also access migratory families at bus and railway stations. They even go into the buses and trains to offer information and register children for vaccination.

3.3 Eradication of Polio through Social Work Methods: Lessons from Angola

Angola along with many other African countries has an elevated fertility and neonatal death rates. Total population of Angola is 20 million, out of which almost half of the population (48%) is below age of fifteen. Although Angola's Ministry of Health is devoted to eradicate polio virus, vaccinating all of country's children has not been an easy task. Furthermore, due to a feeble surveillance setup many polio cases often go unnoticed or not reported and as a result the administration is not able to react timely to stop spread of polio virus. For instance, in the year 2001, there was a huge eruption of over a thousand polio virus cases flocked in 'Luanda', the capital metropolitan of Angola. Provided that less than 1% of population effected from the polio virus demonstrated symptoms of "acute flaccid paralysis", an obvious indication of polio, this meant that the extremely infectious polio virus was widespread in Luanda. Angola is one of African countries, with most urban population (59%). This much concentration of population means polio virus can spread at very fast rate.

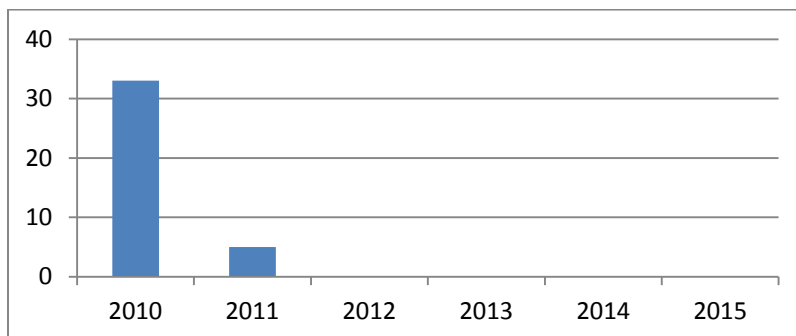


Figure 4 : Wild Polio Virus Cases in Angola. Source: World Health Organization data available at <https://extranet.who.int/polio/public/CaseCount.aspx>

2001 to 2005 was a polio-free period. Another outbreak of polio virus was seen in 2005, unluckily not only Angola six other nations were also infected mainly due to "border crossings". Since 2011, Angola has made a stable development and "there have been no reported cases of polio virus". Angola is now known as polio-free country, but it will take "three to five years of careful monitoring for acute flaccid paralysis", to get certification of polio extinction.

Many activities of Community Social Workers for polio eradication have already been discussed in the Indian context. Here in this section, we will concentrate on some selected activities carried out in Angola, so we can conclude to extract some lessons learnt from both countries.

Educating people: Community Social Workers organize various outreach activities like community talks, variety shows, and street theater. Provision of significant health information again and again from different sources is a key factor for change of “behavior” and an essential support to memorizing important facts so Community Social Workers arrange regular discussions on routine vaccination at markets and other crowded locations. Activities like discussions with groups of house-wives, religious groups, and customary leaders to reach influential groups proved fruitful. Additionally, establishment of media spots to disseminate information about importance of vaccinating kids to prevent them from Polio virus; induction of “young mobilizers”; and mobile cinemas all played a role in “high turn-out” for Supplemental Vaccination campaigns, as well as for normal standard vaccination.

Other “outreach activities” include assistance of “mothers” in taking their kids to fixed immunization setups. This real support to “mothers” can be very productive, particularly if they have other younger kids to care for. This activity has an effect on polio campaign in addition to immunization for other diseases. Another use of street theaters is to prepare the community before and during Supplemental Vaccination campaigns. Discussions about health at community get-togethers to “create awareness” about the indications of “acute flaccid paralysis” and importance of quick reporting also proved effective.

Association with the Army: After the end of civil fight in the country, Angolan army was accessible for nation-strengthening responsibilities like eradication of Polio. They joined with NGOs to carry on the quality monitoring of Supplemental Vaccination campaigns. This monitoring aims to assess that how well the Supplemental Vaccination campaigns grasp kids in need of vaccination. They use data records of NGOs to detect groups of children who have been not immunized before and then find out if they have been vaccinated during the Supplemental Vaccination campaigns. If they found such children, they will assist families in

bringing their children to the vaccination setups or the mobile vaccination team will visit the home.

Initially, there were some concerns that involvement of “soldiers” may possibly be perceived as coercive but meetings with families reveal that “this is not the case”; on the contrary people were delighted to find out that the Angolan government was “showing an interest in their well-being”. The militias not only keep the “careful records” but also “update” records of NGOs. This useful data is utilized to develop upcoming Supplemental Vaccination campaigns.

Reinforcement of Surveillance Skills: Surveillance system for the detection of “acute flaccid paralysis” becomes even more important when countries like Angola wish to maintain their current polio-free status. Activities for the Reinforcement of surveillance skills include getting help in detection and “reporting cases of acute flaccid paralysis”. This information is obtained from local leaders, customary therapists, and informal leaders of families like grandparents. Community Social Workers visit these influential persons frequently to inquire “whether they themselves have seen”, given treatment, or helped cases, not just relying on “a passive surveillance system supposing these persons will report cases spontaneously” but carrying out active case search in hospitals.

4. CONCLUSIONS

Whether functioning in primarily “rural or urban” parts or a blend of both, social work activities discussed in previous sections of this paper reflect the aforementioned “principles and lessons”. They can be useful to polio extinction campaigns as well as maternal and child health programs in Pakistan.

Customize the Approach through Research: Messages about polio campaign can be tailored in the nation context, according to needs and priorities of local population. For instance, a “rural/urban” focused approach was adopted in case of Angola and a different approach (rural/urban, Hindu/Muslim, pastoralist/agrarian) applied in India.

Coordination with other Agencies: social work activities must be carried out in coordination with government agencies. In Angolan case, involvement of soldiers proved very fruitful to access hard-to-reach population and a better surveillance system. Law and order situation in Pakistan and particularly recent attacks on polio workers demand such measures.

Repetition of key Information: Individuals are more likely to react if they come across the similar behavior-change messages again and again from various reliable sources.

Never Give up: A single visit to a resilient family is seldom enough; in the same way, obtaining the support of community leaders may take more than one sitting. If one tactic misses the mark, look for other option. Community social workers, administrations, and NGOs of Angola and India worked untiringly to reach the present polio-free status.

Participation of Women: Induction of female vaccinators, social mobilizers, and surveillance staff has proved very fruitful in polio eradication campaigns. Formal or informal women leaders who support vaccination in their discussions and talks, their own kids serve as role models for other families. Role of female community workers is significant as it is easy to communicate with a female for mothers and other female caregivers. Furthermore, women may also gain access to the households of susceptible families where male would never be allowed to enter. Moreover, the “participation of women at all levels” supports “women’s status” rather than supporting “gender-inequitable norms”.

Role of Children: Take in teenagers in campaigns against polio to deal with “campaign fatigue”. They can also help to stimulate and encourage families to vaccinate their children during Special Immunization Campaigns. It also familiarizes teenagers to “community service”, implants in them precautionary health manners, and provides them life-saving information they can use in their future life.

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TEACHER EDUCATION REFORMS FOR INCLUSIVE EDUCATION IN PAKISTAN

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ABSTRACT

After about a decade long hectic struggle of advocating inclusive education, two large districts in Punjab province are implementing inclusive education in Pakistan. In spite of all legislation, administrative will and financial support the process is extremely slow. Along with other possible barriers the orientation and training of teachers already working in regular schools have emerged as major obstacles to inclusion of children with special needs in mainstream schooling. The teachers tend to be very selective in terms of taking students in their class. The children with disabilities have been marginalized from the mainstream schooling since long. The perceptions about human diversity are extremely narrow. The teachers have minimal knowledge about various types of special needs of marginalized children. It has been realized that the foundations of education need to expanding order to provide meaningful access to all out of school children. The psychology of the child lacks the content about marginalized children and sociology of education denies the existence of these children. Similarly the pedagogy taught in teacher education institutions is deficient of those teaching strategies that are imperative for including marginalized children in regular schools. This concept paper will explore the possible teacher education reforms that can serve the cause of inclusive education. At the same time these reforms should be well grounded in the socio-cultural realities of the country. The proposed content as well as pedagogy of new initiatives will be discussed in this paper.

Keywords: Inclusive education, Teacher education, Human diversity, Marginalized children, Mainstream schooling.

1. INTRODUCTION

Education has gone through fundamental changes in its theory and practice during last three decades. The global movements such as education for all, MDGs, SDGs have changed the basic assumptions of education. Education is no more meant for few elites. It is recognized as a right of every child irrespective of any difference i.e. ability, color, caste, financial status, gender etc. Inclusive education is being ascended as a possible way forward to support the philosophy of right-based education. Inclusive education has proved itself as the most effective strategy for integrating children with special needs in regular schools. Intensive research studies were conducted to identify various barriers to inclusive education.

With the passage of time it was realized that attitudes of the teachers towards inclusive education are dependent on their understanding of inclusive education as a concept and philosophy. These studies suggest that the role of competent and trained teacher is more important than any other component of teaching learning process i.e. class room size, composition and infrastructure (Bailleul et al., 2008). The beliefs, values and knowledge skills of a teacher contribute in creating and maintaining an inclusive culture in classroom (Reynolds, 2009). However, teacher education programs play an essential role to fabricate new generation of teachers for inclusive schools.

The realization that existing teacher education program has failed to prepare teachers for inclusive education is on the rise. Teachers are expected to respond to challenges faced in the daily encounter with variety of learners. The tendency to find kids who can better fit to system requirement has no place in school today. EAD (2010) has rightly pointed out:

...demands on the teaching profession are evolving rapidly, requiring teachers to reflect on their own learning requirements in the context of their particular school environment and to take greater responsibility for their own lifelong learning. (P. 14)

One of the remains of industrial model in education is that education system overemphasizes the need of specialists. Any abnormal situation necessitates the services of specialists. As a result the opportunity to strive

for innovative solution is diminished. Moreover, the ability to accommodate diversified needs of learners is reduced. Teacher education must create ability to experiment by facing novel situations that can pave a way to innovation. Sarason (1990) comment on this phenomenon by in the following words:

‘School personnel are graduates of our colleges and universities. It is there that they learn that there are at least two types of human beings, and if you choose to work with one of them you render yourself legally and conceptually incompetent to work with others’ (p. 258).

There is a need to change not only the content of teacher education but also the mindset of the teachers in such a way that they can recognize the human diversity and create acceptability in their minds and hearts. However, it is equally important to understand the true sagacity of recognizing diversity. This may be defined as those characteristics or abilities of teacher that can affect the developmental potentials and learning along with other differences i.e. culture, religion and socio economic status (OCED, 2010). Several studies also conclude that teachers are at heart to any educational setting whether special, regular or inclusion but most of them are not qualified in dealing with children with disabilities. It may be argued that most of them do not have skills and knowledge to work with all of their future students although they have good heart towards the “diversity of instruction” (Jones & Fuller, 2003, Edward & Kuhlman, 2007).

Review of literature reveals that most commonly used models in teacher education programs include mandatory or elective courses on inclusive education or special education instead of designing an integrated program. The segregated approach for designing models of teacher education programs not only creates divide between the skill developments of prospective teachers but it also forms attitudinal barriers for acceptance of all learners.

Florian and Rouse (2009) explain the situation as following:

‘.... modules or units on special education in initial teacher education serve to ‘reinforce the sense of separation that characterizes special

education and leads to the belief that such children are the responsibility only of those who have undertaken specialist courses' (p. 596).

The context of Pakistan

Pakistan has the largest public school system along with teacher preparation and training programs with segregated models for regular and special education system. Teacher education institutions are offering teacher education programs separately after completion of 14 years of education i.e. B.Ed. (general, special,), M.Ed. (general, special), M.A Education, (Special education). Now B.Ed. education and special education programs have been converted into 4 years BS programs. The history of separate special education teacher education program for special education is not very old in Pakistan. These programs were launched in late 90s in Pakistan mainly in three public universities.

The prime objective of these teacher education programs was to prepare special education teachers to educate children with special needs in a segregated learning environment. The segregated teacher education programs developed an attitudinal divide as a mindset of special teachers (Hussain, 2012). The attitudes of regular education teachers may be explained as intentional (to avoid extra efforts) and unintentional (lack of knowledge and skills). However, the special education teachers are rigid in their attitude by imposing their technical ownership towards the exceptional learners (Behlol, 2011).

In pursuance of international commitments and global movements, Department of Special Education, University of the Punjab took a lead by initiating inclusive education movement in the country during 2005. The small scale initiative was then became a part of global initiative and start providing initial technical support to the agencies involved in the implementation of inclusive education. At present, general education teacher programs have included a course on inclusive education as compulsory course in few institutions that is not sufficient to meet the requirements of attitude transformation and skill development in prospective teachers who are capable to accommodate all learners with special needs in regular classroom to meet the targets of "Education for All" and "Sustainable Development Goals".

Several studies indicate that teachers have low motivation and preparation to accommodate diversified needs of children with disabilities in regular schools. Hence, a large number of these children remain out of school in spite of presence of a nearby school. Even the mainstream schools also face challenges in addressing the needs of children with disabilities (Singal, 2015, Hassan, Parveen, & Riffat-un-Nisa, 2010). In a study conducted on 75 mainstream schools of Lahore, Pasha (2012) reported that schools were not ready to include these learners due to lack of resources, infrastructure and mainly the teachers attitudes and skills. Teachers were not professionally equipped with the methods and trained to deal the exceptionalities in learning.

In a similar study conducted by Haider, (2008), majority (70%) teachers were of the view that they are not trained and equipped enough to adapt instructions and curriculum for children with special needs. Negative attitudes of teachers and inadequate support system for teaching are key issues in implementing inclusive education. In a recent study Sharma, Forlin, Deppeler & Yang (2013) highlighted some major issues of inclusion and teacher education in Pakistan. At national level, there are not clear policy guidelines or regulations for the systematic adjustment of teacher education programs, resultantly; inclusion is just tailoring in the country. An enormous inequality exists between provinces, urban and rural communities in offering inclusive education programs and effective professional development opportunities for teachers to implement inclusive education practices. The country lacks in any systematic teacher education program that is explicitly voiced for inclusion of children with disabilities.

Contemporarily, efforts are being made on small scale by INGOs to provide teachers training programs i.e. the results of a study reveals in following manner:

... even small amounts of training made noticeably improvements in teachers' abilities to work inclusively: When training was provided to Pakistani primary teachers, they were able to make changes in their pedagogy and become more accepting of differences in their students, which are necessary initial steps to making classrooms and schools more inclusive (Awan, Caceres, Nabeel, Mageed, & Mindes, 2010, p.vi).

Huge amount of money with a substantial foreign financial support is being spent to implement Punjab Inclusive Education Project (PIEP) in two large district of Punjab involving 3158 Primary schools and 8180 teachers working in these schools who lack orientation, training and incentives to put extra effort for this project (Bureau of Statistics, Govt. of the Punjab, 2014). Special Education Department, Govt. of the Punjab is the main agency to execute the PIEP. The project team is expecting miracles and hence paying no heed to the real challenges they will have to face. Their expectations about classroom teachers of recipient schools may turn unrealistic soon. These teachers are neither friendly nor competent enough to embrace inclusive education. The in-service refresher courses are both insufficient and ineffective for the task. Unless the teachers education programs are recast to change the orientation as well as service delivery the product of these institutions will productively participate in PIEP.

The study is aimed to review the prevailing situation of teacher as an agency to support inclusive education. Following are the objectives of this study:

1. Review the prevailing situation of out of school children with disabilities in Pakistan.
2. Explore the linkage between the teacher education and out of school children with disabilities.
3. Identify the gaps of teacher education in meeting the challenges of inclusive education.
4. Propose recommendations to mitigate the barriers for inclusion of all children in schools.

2. METHODOLOGY

An intensive review of literature was undertaken to explore the latest trends and practices in the region regarding teacher education for inclusive education followed by focus group discussion of eminent teacher educators. The priorities in the field of teacher education specifically used for inclusive education set by international agencies were also rigorously reviewed. On the basis of initial review, a presentation was delivered by the researchers to a panel of field experts to have their viewpoint on the basis of challenges of local educational realities. A brief was shared to level off the understanding of the context (Box. 1).

The teacher educators involved in preparation of regular school teachers were first to express their opinion on each issue. The special education teacher educators were encouraged to comment on the opinions expressed by general teacher educator. Further, their opinions were documented and thematically analyzed on above mentioned challenges of teacher education. The contribution from these experts is very informative as it initiated a learning process for all. The discourse kept evolving more and more around inclusive philosophy and as discussion proceeded. Finally, recommendations were made on the basis of salient features of the discussion.

Box. 1 The Case

About 6 million children at primary level are out of school in Pakistan. This is second highest number in the world after Nigeria. One third of these children (about 2400000) are children with disabilities (UNESCO, 2015). These children are under difficult circumstances as they have no access to school. Schools at their door step are not ready to accept these children as they lack flexibility to accommodate their special needs. The inability of the school can be attributed to several factors such as lack of orientation and training of teachers to accommodate children with disabilities in the classroom, unfriendly attitude of the head teachers, social and physical environment of the school and resources. A global experience on inclusion indicates that knowledge about disabilities can transform the regular teachers into vibrant inclusive education leaders. This new role of teachers can only inculcated through inclusive teacher training program. The psychological, social and economical foundations of existing teacher education in Pakistan have bitterly failed to produce such leaders.

3. FOCUS GROUP DISCUSSION

Eminent experts from both teacher education programs were invited for the focus group discussion. A presentation was delivered to the participants' of group discussion. After the presentation the researchers raised the following issues for discussion:

- With what kind of orientation of the teachers' school can be made a place for learning and welcoming for all children?
- What kind of pedagogy would be appropriate to accommodate diversified needs of children?

- How the existing curriculum, instruction and assessment can be made flexible enough for adaptation?
- In what way the teacher's mindset can be transformed to act proactively for bringing out of school children in schools?

The view point of the various experts who actively participated in the discussion is as under:

Participant 1

Ph.D. Science Education (PU), Professor & Chairman, Department of Science Education, Institute of Education and Research, University of the Punjab, Lahore

Participant 1 actively participated in the development of the pre-service teacher education (Pre- STEP) program in the country. He is well known for his experience and expertise in teacher education. Being NCRC member he expressed his dissatisfaction by saying "there is segregation between teacher education curricula for general education and special education teachers". As a result both NCRCs function quite independently and all possibilities of integration are ruled out. So there must be combined NCRC meetings as special education is a part of education. Some common courses may be included in general teacher education programs for the orientation of general teachers about disabilities. Higher Education Commission may provide grants to conduct seminars for the transformation of attitudes of regular and special education teachers. Government should create posts of inclusive education teachers in regular schools so that the needs of children with disabilities can be catered for.

Participant 2

*Ph.D. in Education, Wayne State University, USA. MS in Education, New Castle University, UK.
Professor & Chairman Department of Islamic Education, Institute of Education and Research, University of the Punjab.*

Participant 2 highlighted the importance of well thought-out teacher education for the implementation of inclusive education. He pointed out that only teacher education with new orientation can impart knowledge, skills and attitudes that can help the teachers to take up the challenge of inclusive education. Special attention should be given to attitude transformation. The concept of inclusive education should be blended with Islamic teachings in order to make them acceptable for the teachers in

Pakistan. He was of the view that courses on inclusive education must be a part of regular teacher education program. However, there is a point of concern as well. The regular teachers are already over burdened due to inflated teacher-student ratio (i.e. 1:120), multi grade classroom teaching, high-stake testing, accountability threats and additional irrelevant duties assigned by government. Due to all these saddle assignments, regular teachers don't even bother to accept an additional task such as including children with special needs in their regular classrooms. So, we may offer some common courses for both teacher education programs in which teachers can learn through shared experiences.

He also emphasized on the need of a new breed of researches to come up with the new sociology of education to meet the challenges of teacher education. Who can help in developing a sociology of education that can explain the full range of human diversity to the prospective teachers. He expressed his grievance about non serious attitude of government in spite of ratification of several national and international treaties in the wake of "Education for All". He suggested that government may initiate small scale studies in collaboration with teacher education institutes instead of making a solo flight under the leadership of a bureaucrat instead of an education expert. There is a need to create awareness among working teachers about inclusive education and its demands as well.

Participant 3

Ph.D. Special Education (PU), Assistant professor, Department of Special Education, University of the Punjab

Participant 3 emphasized on the need of revamping teacher education program for the successful transition of educational practices. The most important in this area is to make rigorous analysis of current teacher education courses through the establishment of research and development unit. The reports of this unit may be published and shared to National Curriculum Review Committee. Moreover, in-service teacher trainings may also be encouraged to transfer baseline knowledge about inclusive education to working teachers. However, it is also imperative to select right type of group for trainings who are not only serious and conceptually clear about inclusive education but also willing for the acceptance of change. There is also a dire need to develop right kind of pedagogy and production of instruction material to provide support to regular schoolteachers.

Participant 4

Ph. D. Special Education, Assistant Professor, University of Education, Township Campus, Lahore

Participant 4 argued that although theories of inclusive education are aligned with our socio-economic realities but teacher education in vogue is aligned and our local practices lack all coordination. It is imperative to revise national curricula in order to align with the theories of inclusive education practices. WHO, International Classification of Functioning may also be integrated in teacher education programs for the better orientation of disabilities. It will also be helpful if some courses on disabilities and inclusive education may be included at graduate level courses in general education. There is need to hold joint meetings of general and special education teacher educator for detailed review of teacher education programs in the country.

Participant 5

PhD in Education (UMT), Associate Professor & Chairperson, Department of Education, University of Management & Technology, Lahore

Participant 5 was of the view that training for inclusive education is not effective until leadership of the schools is also involved in these types of trainings. The role of head teacher or school principal is very important for the integration of children with disabilities. Another possible way to take start at initial level is by establishing an independent room (resource room) at each regular school to integrate children with disabilities. Moreover, volunteer teaching at public schools may be encouraged to cover the gap of teacher student ratio. The curriculum development authorities may revise the curriculum according to new sociology of education that may support inclusion. She also emphasized to include a chapter in each course of teacher education program instead of introducing one or two independent courses on inclusive education. This transformation in education setting may be taken as social moment for the strengthening and acceptance.

Participant 6

Senior Special Education Teacher, Department of Special Education, Govt. of the Punjab. PhD Candidate, University of Management & Technology, Lahore.

Participant 6 highlighted the special needs of students with hearing impairment. She argued that communication skills particularly in sign language is a must for the training of inclusive teachers.

Participant 7

Special Educationist, Child Welfare Center, University of the Punjab. PhD Candidate, University of Management & Technology.

Participant 7 reiterated the need of a new teacher education program jointly prepared by both sides of teacher educators. The current lots of teachers are not capable to proactively work for inclusive education.

Participant 8

PhD Scholar, Lecturer, University of Management & Technology, Lahore.

Participant 8 emphasized the need of support material and assistive technology for prospective inclusive teachers.

Participant 9

PhD Candidate, Lecturer, University of Management & Technology, Lahore.

Participant 9 maintains the children with autism are included in regular round the globe but in Pakistan there is a organized opposition to this idea. The future teacher education program must respond to this in such a way that they are not left behind which be a violation of UNCRPD.

Participant 10

PhD Candidate, Lecturer, University of Management & Technology, Lahore.

Participant 10 pointed out the student with behavior problem need training behavior management strategies that should be a part of teacher education program of the future.

Participant 11

Senior Special Education Teacher, Department of Special Education, Govt. of the Punjab. PhD Candidate, University of Management & Technology, Lahore.

Participant 11 is a senior teacher in public sector for last 10 years and teaches children with special needs. During discussion she highlighted a very technical point related to curriculum adaptation according to diversified needs of the learners. It is equally important to focus on the

courses of instructional design and curriculum development of both teacher education programs to understand and hold the grip on the subject.

4. DISCUSSION

The preceding analysis of the situation indicates that teacher education both in general and special education are still two steams in theory and practice. There is a rising realization, however, that inclusive education is the only way forward if we are serious to meet the challenge of large number of out of school children. The concept of inclusive education is not clearly understood and is open to any interpretation. The charity paradigm is popular mindset among general education teacher educator who hardly goes beyond inclusion of children with mild disabilities. The teacher education courses are not suitable for preparing inclusive teachers either as they are predominantly based on medical/ pathological model requiring laboratory setting under the supervision of highly specialized professionals.

There is a dire need to prepare and organized a team of inclusive teacher educators who can take head start for reconstruction of teacher education programs in the country. The High Education Commission, Pakistan should take up this innovative development project. At initial stage the services of foreign experts can be hired who will help to develop courses embedded with new sociology. A sociology that explains the human diversity and a sense to celebrate it in a meaningful way. It should also come up with a psychology that instead of classifying and labeling the human race work for understanding difference and describing it in a way that can create equal respect for all human being with difference.

Critical theory can help in teaching prospective teachers how to effectively use knowledge for emancipation from positivistic mindset (medical model) and create social order that free them from dogmatic beliefs and distorted language. Paul Frere's pedagogy of the oppressed may used as a support material for developing a new consciousness. UNCRPD guidelines to understand disability by focusing not only on individual with handicapping conditions but on the environment which silent shape the disability as an outlier. The new pedagogy needs to be restructured for a kind of teacher education we need to implement inclusive education in letter and spirit.

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QUALITY INDICATORS FOR SPECIAL EDUCATION SCHOOLS: ANALYSIS OF PERCEPTIONS OF STAKEHOLDERS

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ABSTRACT

There are many indicators that contribute to the academic performance of special students and increase the fame of the Special Education Schools. The study was conducted to identify the quality indicators for special education schools. The objectives of the study were to identify, integrate, and rank the special education school quality indicators according to frequency and intensity. This research was delimited to the government special education schools of District Gujranwala. The sample comprised of twenty-five special education schools, 125 teachers, and 250 students. Three questionnaires, first for the principals, second for the teachers and third for the students were developed on five-point Likert scales. Chi-Square and percentage were applied to analyzing the collected data. There were found twelve indicators. The study found that physical facility, school environment, expectations, examination system, parents' role and school management were the top six indicators of high academic performance of students. It was found that strong management, competent teachers, and strong internal examination system result in the high academic performance of the students. It was concluded that the conducive environment, provision of physical facilities, the incentive for teachers and full day schooling were also very influential for the high academic performance of the students. Recommendations included that reward for the teachers and students, in-service training and participation of the parents are necessary for the high academic performance of students.

Key word: Teacher Quality, Teaching Practices, School, Indicators perception, Stakeholders.

1. INTRODUCTION

Education is the backbone of the development of country. The quality of education is closely related to many indicators like qualification of teachers, curriculum, educational material, teaching methodologies, equipment and physical facilities such as well-designed and well-equipped classrooms and laboratories, availability of libraries, furniture, playgrounds, portable water, electricity, gas, boundary walls, textbooks and teaching aids (Tahir, 2010).

It has become a custom in the education field that a school is known and regarded for its reputation got through its quality education. The quality of schooling is linked with the qualification of teachers, curriculum, educational materials, teaching methodologies, equipment and physical facilities such as well designed and well equipped classrooms and laboratories, availability of libraries, furniture, playgrounds, portable water, electricity, gas, boundary walls, textbooks and teaching aids (Governmentt of Pakistan, 1998).

With the establishment of a school, it carries certain goals. Every school has got its aims and hence specific grounds are laid to carry on. Goals have lots of influence on the learning strategies employed in any given task (Pintrich, Conley & Kempler, 2004).

The academic performance of students is affected by several indicators like school management, teacher competency, school environment, assessment system and physical facilities. It is the demand of every stakeholder; that school must ensure these indicators in school culture so that top positions may be gained. For this purpose, the researcher intends to study those indicators that influence the overall process in school. Therefore, the research has focused to identify quality indicators at the secondary level.

The study was conducted to identify the special education schools quality indicators at the secondary level. The school needs to be well-equipped with all the physical facilities to support the students enhance in studies. The most important indicator if considered is the assessment system (Adeyemi 2008). This makes the students work hard and maintain certain criteria that would consequently benefit them for better future. In this context, the researcher has tried to

identify and integrate all those indicators that contribute to the academic performance of students at secondary school level (Bibi 2005). So the task of the researcher is to investigate the school quality indicators at high school level.

Dalin (2005) argued that whatever the nature of their judgments, the quality of Special Education has for many years been a matter of concern to most parents, some of whom put their child's name down for 'a good school' even before their child is born. Furthermore, every parent wants his/her child to have 'a good education' and that is often equated with sending him/her to a 'good' school (MacBeath, 2004). Ediger and Rao (2005) stated that a school is effective when it surpasses the predictions success of its pupils. It is hard to see how any school could be called effective without broader measures of achievement such as improved attitudes, motivation and challenging-to- measure skills such as learning.

According to the MacBeath (2004) there were several properties of a good school like values and accurate judgments of students, proper physical facilities, good classroom environment and well trained staff.

Hopkins and Reynolds (2001), discussed the effectiveness of schools. They said that the first decision to be made in effectiveness research is the outcome on which school will be measured. The selection is not a nature activity. A tendency to choose the 'measurable' leads to focus on examination and test results; the implication of this is that we all agree that the school's main task is to get many children through examinations as possible. Contrast to this, Nayak (2002) stated that the other possible goals of the school related to citizenship, workplace preparation, family life preparation, political awareness, self-esteem, social responsibilities, caring for others, solidarity and cooperation, lifelong learning, even happiness – are implicitly secondary to competitive testing. From the above list it is clear that it is harder to evaluate such longer-term effects, which is why they are discarded as outcomes to be measured (Harber & Davies, 2002).

Salfi and Seed (2007) reported the empirical base to be over 60 studies, with a review to be found in Avalos (1980), Fuller (1987), Fuller and Heynman (1989), and) traces the in three generations -

1960s, 1970s, and 1980s, - evidencing increasing sophistication in statistical technique and more lately, and multi-level modeling. and the proportion of studies that confirm its importance in student achievement.

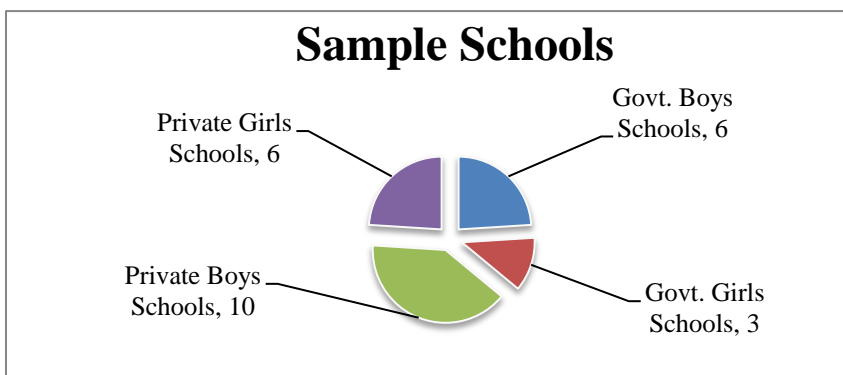
2. RESEARCH METHODOLOGY

The study was descriptive in nature, and the survey was conducted to collect data. The research was quantitative in nature.

2.1 Participants

The population of the study consisted of all heads, teachers, and students of special education schools.

Purposive sampling technique was used to select the sample Special education schools. Principals of top twenty-five secondary Special education schools were taken as a sample. From each school five teachers and ten students from the 10th class were randomly selected. Total four hundred respondents were taken as a sample.



2.2 Research Instrument

Three questionnaires were framed for the collection of data for this study. Questionnaires were developed for data collection after reviewing the related literature and previous researches. The questionnaires consisted of twelve indicators. Likert five-point scale was used with options always, often, sometimes, rarely, and never.

For the present study, questionnaires were subjected to a pilot run for its reliability and validity.

Validity: Content validity of the questionnaires was judged by the experts.

Reliability: Cronbach alpha technique was used to find out the reliability of the questionnaires. Its value was 0.78.

2.3 Data Collection

Data were collected through personal visits to all the sample Special education schools. The questionnaires were distributed to the principals, teachers, and students with the permission of the administration of the Special education schools. The researcher made frequent visits to the sample Special education schools to collect the filled questionnaires from the principals, teachers, and students.

2.4 Data Analysis

The collected data were tabulated and analyzed by using the mean score to rank the school quality indicators.

2. FINDINGS

Quality is one of the major concern of all type of stakeholders. Gronlund (2002) stated that it is commonly observed that there are so many indicators that are affecting the academic performance of students in general and teaching quality in specific. There are many other researches like Warwick, & Rimers, 1992; Tamunodienye 2012; Yaqub 2004; Racino 1999; and Harry 1992 list different quality indicators. From the jungle of quality indicators, following ten were adopted as main indicators of quality. These were ranked according to principals, teachers and students preferences

Indicator 1	School Management
Indicator 2	Teachers' Competency
Indicator 3	Assessment Systems
Indicator 4	School Environment
Indicator 5	Physical Facilities
Indicator 6	Classroom Language
Indicator 7	Rewards and Punishment
Indicator 8	Peers Relationship
Indicator 9	Expectations
Indicator 10	Homework

These indicators were consider as most important by Principals, teachers and students. Below is the ranking followed by overall ranking

3.1 Ranking of the Indicators

Table 1: Ranking of the Indicators According to the **Principals' Views**

Sr. No	Indicators	Mean Value	Rank
1.	Assessment Systems	4.60	1
2.	Physical Facilities	4.53	2
3.	School Management	4.52	3.5
4.	School Environment	4.52	3.5
5.	Expectations	4.48	5
6.	Homework	3.97	6
7.	Classroom Language	3.96	7.5
8.	Rewards and Punishment	3.96	7.5
9.	Peers Relationship	3.92	9
10.	Teachers' Competency	3.87	10

Table 2: Ranking the Indicators According to the Teachers' Views

Sr. No	Indicators	Mean Value	Rank
1.	Physical Facilities	4.69	1
2.	Assessment Systems	4.51	2
3.	Expectations	4.50	3
4.	School Environment	4.43	4
5.	Rewards and Punishment	4.13	6
6.	School Management	4.11	7
7.	Peers Relationship	4.10	8.5
8.	Homework	4.10	8.5
9.	Teachers' Competency	4.08	9
10.	Classroom Language	3.93	10

Table 3: Ranking the Indicators According to the Students' views

Sr. No	Indicators	Mean Value	Rank
1.	School Environment	4.67	1
2.	Expectations	4.52	2
3.	Physical Facilities	4.44	3
4.	Assessment Systems	4.29	4
5.	Peers Relationship	4.18	5
6.	Homework	4.01	6
7.	Rewards and Punishment	4.00	7
8.	School Management	3.85	8
9.	Teachers' Competency	3.83	9
10.	Classroom Language	3.74	10

3.2 Integration of Indicators ranked by principals, teachers and students about the Special Education School quality indicators.

The second objective was about the Integration of Indicators ranked by principals, teachers and students about the Special education school quality indicators. In this regard, a table was developed to give the integrated picture of the indicators which was as under:

Table 4: The mean values of the indicators according to the principals, teachers and students' view are given in column (a), (b) & (c) respectively.

Sr. No	Indicators	Rank (a) Principals	Rank (b) Teachers	Rank(c) Students
1.	School Management	3.5	6	8
2.	Teachers' Competency	10	9	9
3.	Assessment Systems	1	2	4
4.	School Environment	3.5	4	1
5.	Physical Facilities	2	1	3
6.	Classroom Language	7.5	10	10
7.	Rewards and Punishment	7.5	5	7
8.	Peers Relationship	9	7.5	5
9.	Expectations	5	3	2
10.	Homework	6	7.5	6

3.3 Overall Indicators' Ranking

Table 5: Ranking of the indicators based on the average value of the mean value provided by the principals, teachers, and students

Sr. No	Indicators	Respondents	Mean Value	Average Value	Rank
1.	Physical Facilities	Principals	4.53	4.553	1
		Teachers	4.69		
		Students	4.44		
2	School Environment	Principals	4.52	4.541	2
		Teachers	4.43		
		Students	4.67		
3	Expectations	Principals	4.48	4.498	3
		Teachers	4.50		
		Students	4.52		
4	Assessment Systems	Principals	4.60	4.467	4
		Teachers	4.51		
		Students	4.29		
		Teachers	4.15		
		Students	4.34		
1.	School Management	Principals	4.52	4.161	5
		Teachers	4.11		
		Students	3.85		
2.	Peers Relationship	Principals	3.92	4.068	6
		Teachers	4.10		
		Students	4.18		
3.	Homework	Principals	3.97	4.028	7
		Teachers	4.10		
		Students	4.01		
5	Rewards and Punishment	Principals	3.96	4.024	8
		Teachers	4.11		
		Students	4.00		
6	Teachers' Competency	Principals	3.87	3.933	9
		Teachers	4.08		
		Students	3.85		
7	Classroom Language	Principals	3.96	3.878	10
		Teachers	3.93		
		Students	3.74		
		Teachers	2.80		
		Students	3.15		

On the basis of data analysis, the findings of the research were as under:

1. The first effective school quality indicator was the management which included decision making, cooperative working relation, observing teaching activity, suggestions for improving teaching skills and preparation of academic calendar. There was no significant difference among the principals, teacher and students' view.
2. Secondly, it was teachers' competency which included lesson planning, use a variety of teaching skills (lecture, discussion, demonstration methods, etc.), motivation and in-service teacher training. There was no significant difference among the principals,' teachers' and students' view. However, the use of audio-visual aids was rejected, as there was a significant difference among the principals' view. However, there was no significant difference between the teachers and students' view.
3. At the third place was studied the assessment system which included an arrangement of tests and maintaining its record. There was no significant difference among the principals, teacher and students' view.
4. Assessment system was followed by school environment which included working relationship of principals, teachers, and students. There was no significant difference among the principals', teachers' and students' view.
5. Physical facilities do contribute to the performance of students. These included furniture, laboratory facilities, and availability drinking water. There was no significant difference among the principals, teacher and students' view.
6. Use of language was also studied. It focused on the preference of the use of Urdu or English. The statement was accepted, as there was no significant difference among the principals, teachers and students' view whether they preferred the use of Urdu in the classes. However, the statement was rejected, as there was a significant difference among the principals' view that they preferred the use of English in the classes. There was a contradiction about principal and teachers, students' view.
7. Students and teachers were encouraged and motivated by appreciation and rewards. There was no significant difference

among the principals, teachers' and students' views about the rewards.

8. Working relation with peers also shows the impact on students. There was no significant difference among the principals', teachers' and students' views that the students liked to work in groups and gave tough competition.
9. Expectation also plays a vital role in the performance of the students. There was no significant difference among the principals, teachers and students' view that the teachers and students would get a position in the board exam.
10. Lastly, was the homework which included assigning and checking homework by teachers and principals. There was no significant difference among the teachers' and students' views about the assigning and checking homework by teachers.

4. DISCUSSION

The discussion on these factors were as under

School Management

It is widely recognized that one of the key indicator influencing school effectiveness is the nature and quality of the leadership and management provided by school administrators (Racino 1999). The successful Special Education Special education schools had been at it for several years, and were learning and gradually putting in place the elements of effective school-based management and educational improvement. Principals learned new ways of influencing and leading and began to see themselves as managers of change (Goel, 2005).

Teachers' Competency

It was teachers' competency which included lesson planning, use of a variety of teaching skill (lecture, discussion, demonstration methods.), motivation and in-service teacher training. There was no significant difference among the principals', teachers' and students' view. This inline with the argument place by Warwick, and Rimers (1991), who stressed for combine efforts and technical expertise of all stakeholders. However, the use audio-visual aids were rejected, as there was a significant difference among the principals' view. On the other hand, there was no significant difference found between the teachers and students' view which supports to Harber & Davies (2002) view. In the same thread, Kaufman (2006) stated that good teacher was paramount for the academic performance of

students, but it was impossible to measure input from specific teachers. A competent teacher has a command on the subject matter and gets training on new initiatives in educations. Continuous professional development has polished the abilities of the teacher (Tahir et al., 2011).

Assessment Systems

Tomlinson (1992) and Tamunodienye (2012) were in the view the assessment system was the key indicator of any institution. A proper test system was concerning answering written or oral questions with no or limited access to textbooks. A set of questions or exercises were evaluating skill, knowledge, and attitude of any nations. Proper assessment system gives the right direction and shows the intellectual level of the nation Aijaz (2002). Through assessment system, teacher must have success to know that the factual memory; skills mastery, applications in real-life settings, use tests or competitions, etc. to assess understandings and recognize misconceptions then clear them up (Goel 2005). Tahir (2010) stressed that it is the need of the day and stated that “So the need of the hours was establishing a strong the examination system, a separate paper setting and marking mechanism and the most important the record keeping of all these things” (Tahir, 2010 p 243).

School Environment

Fuller (1987) while discussing school rising factors, put environment at the top of factors. He argued that the school environment is the total of all external conditions and influences affecting the organism. It is the totally unplanned of what we live in, natural, man-made machines, scientific appliances, equipment and natural conditions such as air, water, and land that directly and indirectly affect human beings (Shahbaz, 2004).

According to Nayak (2002), School Environment is totally of the natural and social factor events, phenomenon and occurrence that directly affect the students’ achievements. The school is a central source of formal education. It is an institution that fulfills tie needs and requirements of the society. However, school and home is equally impartment for the achievement of the academic performance of the students. According to the MacBeath, (2004) learning is as much like home, and community matter as a school matter, and how children learn outside school should be as critical a focus of evaluation as what they learn inside the classroom.

According to Clarke how we create an information rich school environment is one of the big challenges (Clarke, 2006). This was also supported by Chapman (2005) by stating that data richness has long been found to be a critical component of efficient and improving Special education schools in studies. Being data rich means that data can be turned into information used as a basis for school and classroom decision-making.

Physical Facilities

Physical facilities do contribute to the performance of students. These included furniture, laboratory facilities, and availability drinking water. This was favored that students' achievements indicators model, Physical facilities such as drinking water, boundary wall, chalks and writing board play a major role in learning and academic achievements (Shami & Hassain, 2006 & Nayak 2002). Lupton's (2004) supported by Fabunmi, Bari and Adeniji (2007) point out that in Special education schools are in many cases in the state of material poverty. None of the Special education schools could expect financial contributions from parents and pupils for equipment or materials (Harris, Gunraj, James, Clarke, & Harris, 2006). The school size, classroom size, and utilization of the space were an important indicator of the success of any institution. The success of the school depended on the student teacher ratio. The institution must provide the proper student's teacher ratio through rationalization process (Tahir, 2010).

Classroom Language

Language is the identification of any nation and way of expressing of its inner feeling. So L-1 is used for this purpose. However, communication with other countries, trade, and business the L-2 is also needed. English is an international language and necessary for competition in a globalized world order. Urdu is our national language that connects people all across Pakistan and is a symbol of national cohesion and integration. In addition to this, there are mother tongues / local vernaculars in the country that are makes of ethnic and cultural richness and diversity. The challenge is that a child can carry forward the cultural assets and be at the same time, able to compete nationally and internationally (GoP, 2009).

Rewards and Punishment

Hargreaves, and Hopkins (2001) stated the characteristics of effective schools in their famous work on management of empowered schools, opined that rewarding effort is as problematic in schools. This can be applied to special education schools also. Many Special education schools recognized efforts with thank you note, mentions in school newsletters and other acknowledgments. However, several principals said they preferred to de-emphasize the idea of winner and losers to create a sense of community achievement. Some Special education schools scheduled year-end function and parties. Few financial rewards were used in Special education schools (Goel, 2005). Many teachers and trainers do not use punishments, and that is a good thing. Most teachers and trainers use rewards, like small presents or gold stars and most people like receiving them. Usually, we see desirable behavior when rewards are on offer (Taylor, 2006). It is commonly observed that reward was a motivator and used as school quality indicator.

Peers Relationship

According to the Goel (2005), working relation with peers is also an important indicator to measure the quality of any school. Educational diversity as reflected specifically in the composition of students of the different characteristic within Special education schools can easily be observed. As a general term, these compositional aspects are called peer effects. Student features that may be relevant are general; socioeconomic status or family income; race; religion; learning needs or interests; language; culture; and political affiliation Espin (1998); Sanja (2009). An analytical approach would focus on how peers influence each other in generating educational outcomes. It is increasingly clear that peers or fellow students have a significant influence on student aspirations, values, and learning. Thus strong peer sorting will polarize students according to academic achievement and outcome (Goel, 2005).

Expectations

Expectation also played a vital role in the performance of the students (Jorgensen, and Tashie, 2000). There was no significant difference among the principals, teachers and students' view about the teachers and students aiming at getting a position in the board exam. This finding was supported by a good school might be found to have high expectations of students; but those high expectations might be a result of having a good

students' intake for some years that were likely to produce excellent results (Harber & Davies, 2002). As these and other studies have demonstrated, teachers' perceptions and actions are influenced by what they believe, as well as by their knowledge (Borko and Putnam, 1995). Teachers' understanding of expectations is not always clear. In a small study of one secondary school with mixed catchments, encompassing and area of significant deprivation well as pupils from more advantaged homes, questions to several staff members revealed a very narrow interpretation (Clarke, 2006).

Homework

Last but not least was the homework which included assigning and checking it by teachers and principals (Cohen, Manion, and Morrison, 2005). The home homework is also a key indicator to achieving the performance of the school. The success or otherwise, of homework and home study could be put down to some key factors: Three of them related to the school i.e. in school and out of school. There are several different kinds of homework for example practice tasks, to build on what was learned in school; preparation tasks for what will be attended to subsequently in school; extension activities to work undertaken in class; private study for individual work, e.g. personal projects exploratory inquiry. Homework is a powerful means for relating school knowledge to everyday life.

5. CONCLUSION

The following conclusions were drawn from the findings of the research:

1. The management was ranked as a top quality indicator. The involvement of teachers and students in managerial matters produced academic performance (Finding 1).
2. Without competent teachers, any institution did not produce good results. So, for high academic performance, the Special education schools had no flexibility in appointing competent teachers who were professionally skillful. They planned the lesson, used variety of teaching and motivated the students (Finding 2).
3. Controlled assessment system added to the grades of students. A good school was capable of academic performance of students if its assessment department worked well (Finding 3).
4. As far as the environment was concerned, it was conducive being suitable for teaching learning process (Finding 4).

5. Physical facilities created an atmosphere of proper learning for students. The more the students and teachers were facilitated, the higher was their academic performance (Finding 5).
6. Both English and Urdu languages were necessary. However, Urdu was more important for the academic performance of the students (Finding 6).
7. At any achievement, teachers and students were rewarded which defiantly increased their performance (Finding 7).
8. The peers did influence one another. Moreover, they were of same competency and performance (Finding 8).
9. The students and the teachers had high expectations. The teachers needed to remind their students of what they and their parents expected from them (Finding 9).
10. The teachers assigned and checked the homework, but principals did not check it (Finding 10).

6. RECOMMENDATIONS

The following recommendations were drawn from the findings, review of related literature and observations made by the researcher during this study; these may be helpful to get the high academic performance of students.

1. The variety of teaching skills may be useful for having the school performance of students. The teacher may use audio-visual aids, and intensive study may motivate the students. It is possible if the teachers are skillful and have got effective methodology. For this in-service training is quite necessary.
2. Another important indicator is of an internal assessment system of the Special education schools. The test may be arranged weekly, monthly and chapter wise. Test record may be maintained. Papers may be prepared by a committee of subject teachers. Papers may be marked by subject teachers and re-checked by the committee.

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THE SOCIO-ECONOMIC PROBLEMS OF LITTLE PEOPLE IN PAKISTAN

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ABSTRACT

This research article makes the literature review study on socio-economic problems of little people in Pakistan and presents the results from a number of the studies conducted over the past ten years. The review shows how little people face socio-economic problems, like employment, transport, education, health and marriage. The literature illustrates that low economic conditions and social segregation of short people makes them one of the most deprived group of the society and they do not have equal access for jobs and other opportunities. The results have important implications for social and economical equity and recommendations for future research and policy implementations are offered.

Key words: Little People; Socio-Economic Problems, Pakistan.

1. INTRODUCTION

Dwarfism is short stature that results from a genetic or medical condition. Dwarfism is generally defined as an adult height of 4 feet 10 inches (147 centimeters) or less. The average adult height among people with dwarfism is 4 feet (122 cm). Dwarfism can be caused by more than 300 conditions, most of which are genetic and present at birth (Adelson, 2005). Depending on the type of dwarfism a person's body is either disproportionate or proportionate. Dwarfs whose bodies are disproportionate have a torso of average size but short arms and legs, this is visible in conditions such as, Achondroplasia. Dwarfs who are proportionate appear only to be small in height, their arms, legs, trunk and head are in the same proportion as an average size person, only small and they can also have underlying medical states (Chan, 2009). According to an American organization "Dwarfism is when a person have a small height of body, due to various medical conditions and growth hormone shortage" (Little People of America, 2014). There is no medication, and there are different characteristics for dwarfism which varies from individuals. People with dwarfism are chosen to be called as "Little People". Dwarfism also refers to the condition that happens when an individual is short in height, resulting from a medical condition, caused by slow growth. In humans, dwarfism is sometimes defined as an adult height of less than 4 feet 10 inches (147 cm). Dwarfism is permanent after reaching adulthood and therefore it brings not only physical but social and mental problem for the short height people (Mukamel, 2000).

It can be reasoned by any one of more than 300 conditions, most of which are genetic. The most general type, accounting for 70% of all cases of short height, is called achondroplasia. Dwarfism can and most often does occur in families where both parents are of average height. In fact, 4 out of 5 children with achondroplasia dwarfism are born to average-size parents (Voss, 2000). Dwarfism is a physical defect and also a social problem. People with dwarfism are regularly taken as a character of fun or entertain during childhood and this discrimination continues lifelong. Living with dwarfism is not only being smaller than everyone else but they are limited as handicaps and are bounded with limitations in their life. They have limited medical facilities along with different problems in their life they have to deal with. (Case, 2008). Due to the false impression of the average height people, they face insignificant problems like getting on their knees

to keeping their elbow close to their body. With the public dishonor and the labels faced by the short people when it comes to employment or education, the situation is equally disturbing, which disheartens their confidence and interest towards life (Steckel, 1995).

Little people throughout the world face physical and mental problems. They face a range of problems in day to day life; they face complexity to get access to regular furniture, service counters, ATMs, bus stops and etc (Diekema, 1990). Even while reaching for public transport, due to short legs they get easily tired while walking as shorter legs covers shorter area. Their health status gets worse as the premature bones are accelerated. Away from each other with different physical problems they get mental stresses and frustrations due to the prejudiced attitudes, even injustice, mean looks, and sometimes insult (Chu, 2005). Life of little people is hard, socially, economically and mentally. Dwarfs were used to be regarded as midgets which is a banned word now as this is found unpleasant. People with dwarfism live a problematic life as they have to face ridicule and discrimination all day long. This results in decreasing people's self-respect and self-assurance to achieve good things in life. A number of studies have verified reduced employment opportunities and lower income of people just because of their heights (Conrad, 2004).

The United States Agency for International Development (USAID) stresses a key issue: the critical need to change the overall negative and rude societal attitudes that are obstructing the advance of Dwarf. As is the case in the majority countries, most people in world, including those in public administration, tend to falsely perceive people with dwarfs as intrinsically unable of important participation in the social and economic mainstream. In fact, tackling shame and discrimination against dwarf has now emerged as a key issue where as the government wishes to give facilities to dwarf people. However, changing long-held perceptions and attitudes held within society is by no means easy, as it requires monumental efforts from all sections of that society (USAID, 2005).

As in many other developing countries, in Pakistan people with Dwarfs tend to be neglected and as a result are insufficiently supported. Several studies in Pakistan show how dwarf people often live in unfriendly and aggressive environment, meet non-cooperation, ill-treatment, neglect and unfriendliness in their families, communities, society, and in government institutions. They are often disadvantaged, not only of social and political needs, but also fundamental human needs. This neglect is compounded by a lack of accessibility of quality services for people with dwarfs which could otherwise ensure that they were able to participate in the mainstream development activities.

Low economic position and social segregation of Little People makes them one of the most deprived groups of the society. The main problems faced by Little People are employment, transport, education, health, marriage, etc. In an underdeveloped country like Pakistan, short people have very limited access to health, education, recreation and employment. When a child is born with dwarfism, they are taken as a burden to the family and are out casted from the society. Little people not only face deprivation of their rights but love and affection from their family and society.

The little people of Pakistan are facing number of economic problems. Unfortunately, there is no reliable statistical data available regarding the dwarfs in Pakistan. The condition is poor as there is no support or concentration from government and other organizations, no priority from any other profession in society. They are caught up to different types of socio-economic and mental stress, as government has not started any policies for them in Pakistan. They are measured as marginalized people in the society and are restricted of their minimum living standard. Government has been ignoring the essential issues of the little people in our country.

The main purpose of this study was to know the socio-economic problems, like employment, transport, education, health and marriage. How low economic condition and social segregation of short people make them one of the most deprived groups of the society. This study also aims to know their accessibility for jobs and other opportunities in Pakistan.

Historical Perspective of Dwarfism

It is very essential to know the history of little people. As Alderson mentioned that the oldest records of Little People were kept by royal and elite parts of societies (Alderson, 2005). However we know very little about Little Peoples history. Earliest records of little people were found in ancient Egyptian and Greek culture. It is obvious that at least some of Little People were obedient members of royal followers. Similarly, in early 19th century, Little People were kept as pets in palatial households and dresses fancily, fed well, suffocated with impolite kisses and passed from lap and offered to a powerful fan as a gift (Tuan, 1998).

Early sixteenth century in Europe, Little People were among the group of fools who would entertain people. By the late 17th century, little people who worked as dwarfs and other fools were less frequently supported by the courts. As a result many took to the stage to make a better living condition (Kruse, 2010). In 1840, the American Museum opened in USA. For the museum, they hired gypsies, giants and dwarfs (Bogdan, 1988). In 1884, Circus opened a profitable touring sideshow that brought entertaining human funny habits, including 'dwarfs' to people outside of urban areas (Tuan, 1984).

In the 1930s, the majority of the little people in USA were jobless, and those who were not tended to be in the entertainment world. Numerous doors were closed to them. They couldn't be laborers, bus-drivers, clerks and etc. The professions were closed to them, would not only be laughed out of countenance, but would be waste away to death (Fiedler, 1978). During the past half-century, new vocational opportunities, medical growth, and the influence of the civil rights and disability rights movements have led to an increased sense of positive identity among dwarfs in many countries. Symbols of the appearance of a group "dwarf identity" were first noticeable in 1957, when Midgets of America was formed, it was an organized by dwarf actor and advocate and a hotel owner who wanted to announce Reno as the "smallest little city in the world". A second dwarf organization, short heighted people of Australia, was formed in 1962, also by an actor. In France as well, where prejudice was widespread, most of the first group members were performers (Dasen, 1993).

Despite improvements, little people have faced considerable discrimination. Former commissioner of the Equal Economic Opportunity Commission (EEOC) Paul Miller, when he interviewed for his first job after graduating, was pained to see classmates with lower ranks and less experience receive offer after offer, while he received 45 rejection letters without a single call-back (Miller, 1998).

There has been some positive development- such as the fact that a few dwarf formed organizations- it seems improbable that most media and professions will soon display a sensitive, informed attitude about the image of little people. Additional advocacy is needed for dwarf community. An important part will be a raised consciousness among a number of persons with little people about the legacy of their history as interests, and a willingness to engage in soul-searching about how their personal and professional decisions improve or reduce the lives of others like themselves.

Situation in Pakistan

The situation of persons with dwarfism in Pakistan is competitively far lower the average of any part of people. In Pakistan persons with dwarfism are disqualified from the majority of governmental and non-governmental programs. Persons with dwarfism are neglected in Pakistan, as they are in nearly all other developing countries. In Pakistan, where life is difficult for many healthy people, dwarfism is more likely to face much greater problems in the absence of a disabled-friendly atmosphere. They are less likely to be educated, employed or rehabilitated. Social isolation of dwarf persons is tremendously general.

Moreover, social welfare services still do not provide special privileges for the dwarfs. Unfortunately, there is no reliable statistical data available regarding the dwarfs in Pakistan. Today, little people may have to face social, economic and psychological problems because of these profound changes in the family and society. There is, thus, need for steps aimed at improving the economic life of the little people through suitable and practical measures as many dwarfed people favor to working but are prevented from doing so by shortage of jobs and discrimination.

2. METHODOLOGY

The present research study focuses on the socio-economic issues of dwarf people which they face from attitude of community members towards them. Employment, transport, education, health and marriage are the major problems which contribute in lowering their status. Thus, the study aims to analyze issues that dwarf people face due to inequitable attitude of society. The research study is based on content analysis from library research through secondary sources including, a number of documents linked with socio-economic issues of little people in Pakistan as well as published reports and government statistics. The documents analyzed for this research study are selected on the bases of relevance. The procedure of data collection was simple and universal. A systematic search for research papers, reports and other documents was conducted.

3. DISCUSSION

The results show that people with dwarfism live a difficult life as they have to face ridicule situation and discrimination all day long. This results in decreasing people's self-worth and self-confidence to get good things in life. Various studies have verified reduced employment opportunities and lower income of people just because of their heights.

The context of Pakistan is no any different. The little people of Pakistan are even more backward than the rest of the world. Although, there is no reliable data available regarding the dwarfs in Pakistan, whereas the number of dwarfism affected people in Pakistan ranges from 9000 to 10,000. Lack of proper medical technologies causes lack of treatment of the dwarfism even if it is diagnosed at early childhood. After growing up, things get harder from the school life as the children get bullied and laughed. Adulthood becomes even terrible as they would be low in self-esteem and could not fit anywhere in job (Noor, 2012). People with dwarfism live a challenging life in Pakistan, where being in public means getting pushed around, laughed at or worse: Picked up like a child without permission. When looking for a job, the stigma follows them to the interview room where most of them are rejected because of their height despite fulfilling the eligibility criteria.

It is not surprising we remember the only two roles of people with dwarfism from is either a doorkeeper outside a restaurant or a comic character in a show .Little people are not given equal opportunities to

work when they take the same exam, pay the same fee and get no special treatment. In developed countries, little people are found in every profession. In Pakistan, despite the stated commitment to provide equal opportunity, no measures are taken in this regard (Ilyas, 2016). Little people do face discrimination elsewhere. They are hired to be used as a spectacle and treated like a show piece. The idea behind employing them is solely the benefit of the business and not what skills the person has to offer, which is against the very ethos of diversity at workplace (Naqvi, 2016). The main reason that these people do not have any community in Pakistan is due to ignorance by Government or any other public welfare organizations.

The neglecting behaviours jointly act to marginalize them to the border of society in terms of inadequate access to their relatives or neighbors, weaken decision making role, limited facilities, excursion and use of an abusive language by family members against them. As a result they feel anxiety and sense of frustration prevails upon them (Ali, 2003). Moreover, it has observed that little people are shy in having interaction. There is also a majority of little people in Pakistan who are either not educated or don't use the internet. This is also a hurdle to access these people (Natasha, 2015). The parents having such kind of children get worried very soon and find a lot of difficulties to get guidance for their special child. The local doctors have limited knowledge about dwarfism and could not properly satisfy the parents. The parents also worry about their future (Sarmad, 2015).

One of the major problems is that society does not accept them because of their dwarfism. They will not be able to get married. Attitudes and ignorance are mainly strong where dwarf people are concerned - no one would willingly consider marrying off a dwarf person. Dwarf people are often regulated to the lowest status within the community. They are isolated from society and neglected by community members and live in darkness, silent sadness, and total social and economic obscurity. While recognizing that the view of getting married was going to be more problematic than for their able-bodied peers, the majority of them nevertheless were kindly confident of doing so (Mahmood, 2008).

In the same way, little people are considered as a burden on family members and they treat them with a complex of being the underprivileged

of the rest of population. In the economic context, such people are non-productive in terms of economic productivity not only for the family members but also for the rest of society. In this regard, their position at the home and also in common relations is not well adjusted and they fall in the feeling of anomie. They are represented as funny characters to entertain audiences (Niaz, 2009). In hotels or marriage halls, they are treated like attractions to be a magnet for potential customers. Zia government has established “Little People of Pakistan”, a platform for dwarfs to speak their mind about social issues they face but after that it was sustained (Altman, 1981).

People with short heights, behavioral problems and learning difficulties were more likely to be involved with unskilled work such as day labouring. At the same time these people had to face a range of exclusionary attitude in their daily life. These individuals have to more protection and support that will improve their capability to handle and to give them a sense of self-respect and belonging. Families and communities also need awareness raising on psychosocial care and support to decrease discrimination and stigmatization and develop positive caring (Grech, 2009). Little People face considerable challenges in maintaining their livelihood activities. The most common limitation is an inability to do work over long periods due to physical harms, which results in prospective employers not wanting to hire them. They also have face wage discrimination within the workplace. They are therefore deprived of employment opportunities and deprived of a fair wage (WHO, 2011).

They are slowed down to different kinds of physical and mental anxiety, as government has not started any programs for the Little People in Pakistan; they are deprived of their fundamental rights. They are considered as marginalized people in the society and are restricted and limited of their lowest living standard. Government has been ignoring the basic issues of the little people in our society and in our country; therefore different NGO's have been supporting the rights and have provided little people shelter to live. Many Little People in Pakistan have been engaged in dancing and acting, basically in an entertainment sector to earn their living (Ilyas, 21 Aug. 2016).

Members of the local community would often gaze at the dwarf people, causing them to feel depressed. Furthermore, it was stated that some

people with non-disabled children actually stop their children from playing and interacting with those with dwarfism, fearing that the harm may be contagious and may also be related to anger from the God.

Little people are subjected to a variety of types of discrimination and negative attitudes in their daily lives. Exclusionary and discriminatory attitudes displayed in verbal attacks, jokes or harassment. They reported exclusion from land inheritance. Children are also affected by the negative attitudes and behavior of family members and wider society, often through harassment, which leads to self low esteem. Thus discrimination, social exclusion and isolation are a common part of life, for both the dwarf person and their family. They are often neglected by their families, neighbors and community (Titumir, 2005).

As Mr. Kamran who himself a dwarf person and a president of an organization 'Little People of Pakistan' said that "he has tried to get his friends employ at various different places but people's attitude towards us is the same everywhere. Many people want us as a kind of mascot to pull crowds. Some of us find work as novelties at big shops to attract customers. We are just turned into a spectacle and even that would have been alright but then come the demands to find a cute dwarf with cherubic cheeks. We are the jokers, expected to entertain all the time" (The Express Tribune, 2016). Many dwarfs struggle to get their goals and lead highly regarded lives. They have to fight hard in a land that offers them little incentive.

According to Shahbaz Ahmed "he wanted to earn a master's degree but give up education in ninth class because his schoolmates were being teased persistently. Two of his sisters and their father are also suffering from dwarfism and avoid going out for dread of being ridiculed. He has given up hope of a prosperous future; society does not even consider them as humans" (Ahmed, 2013).

Qasim Zia, a 24-year-old bachelor of commerce student, is determined about furthering his education. However, having short fingers, he is often not capable to grasp a pen properly or write for long enough to sit an exam. He has applied for a variety of posts at different organizations only to face rejection. "Interviewers always said I was unfit for the job due to my height" (Wasif, 2013). Rafiq Ahmed is another person with

dwarfism from Rahim Yar Khan, who came to Karachi in search of a job, says that “I saw Karachi as a land of opportunity, just like you all view Dubai”. “I soon got a job as a guard in a house, but they would not pay me more than Rs. 8,000 even though they paid their other servants double that,” he complains. “Some of us out there have even had to resort to begging due to being denied jobs because of our size. The government has reserved a two per cent job quota for us but we are denied even that. We do not want to become a burden on society. We are capable people, who can work like any other persons” (Dawn, 2016).

Little people not only encountered unfriendliness and negative social attitudes from members of their local communities, but were also subject to exploitation by local government officials. Children with short height are likely to practice more isolation and exclusion from their local communities, because some parents feel a big deal of shame, regret and guilt because of their Childs. In such situations, there is a tendency that parents do avoid their children. It was also observed that children have literally been locked up in their houses, and try to hide them, thus avoiding their public shame.

4. CONCLUSION

Research studies on the socio-economic issues of dwarfism in Pakistan indicate the fact that due to the short height; multiple social issues are faced by them. The present research study also support the argument as discussed by other researchers and scholars that in society same issues regarding dwarf people occur. The reviewed data discloses the fact that dwarf people face the problems of discrimination along-with loneliness in Pakistan, which on the other side make them isolated from the rest of population.

It is readily evident from the analysis of the primary and secondary sources of data that there is a direct relationship between poverty and dwarfism. The importance of this relationship is increasingly being recognized by a number of scholars and organizations that dwarfism and poverty are closely related while dwarfism causes poverty. The impact of poverty and dwarfism was also reflected in the data analyzed for this research. Dwarf people from low status families are often supposed as an economic burden whereas, dwarf children from rich families sometimes find being accepted by their families hard, due to the fear of bringing social shame and embarrassment upon them.

The research study further elaborates that dwarfism is not only an economic and social issue but also directs to physical, and psychological issue to a larger extent. The study illustrates that majority of the dwarf people face rejection from community members. Additional, such issues not only influence the social, economic and physiological state of the person but also weakened the social values of the community that directs to social dishonour on the social fabric. Thus, the problems of the dwarf people is increasing with the passage of time, and soon the society will observe a main shift towards giving equal status and respect to them.

5. RECOMMENDATIONS

The socio-economic problems of dwarf people are the result of so many factors. Society, state and dwarf people themselves. The following points are suggested for different stakeholders to reduce the problems of persons with dwarfism.

1. Free medical facilities need to be available at all Government hospitals for the medical care of dwarf people.
2. There is dire need to enhance per-capita income so that the violation of the rights of dwarf people occurring due to poverty may be minimized.
3. The majority of the dwarf persons and community members don't know about Government steps. So the Government steps for dwarf persons need much more propaganda by seminar, conference and media (radio, television and newspaper).
4. The dwarf people do not get very less services and jobs in Government and Non-government organization. The Government and NGO's should take essential steps to overcome these problems and make minimum 2% quota for people with dwarfism.
5. The parents should socialize their children the respect of dwarf people.
6. The constitution of Islamic Republic of Pakistan 1973, after 18th amendment, under Article 25(A) provides free and compulsory

secondary education as fundamental right for Pakistanis and responsibility of the state so Government should give equal opportunities to dwarf people to get education.

7. Technical education should be provided to dwarf people. This will enable them to start self-employed business.
8. Priority **seats** should be designated in **public transport** vehicles by transporters to allow dwarf people to travel **public transport** with an equal degree of access and comfort as normal people.

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A STUDY OF INSTRUCTIONAL LEADERSHIP BEHAVIOR OF SECONDARY SCHOOLS' PRINCIPALS AS A CRITICAL INDICATOR OF SCHOOL CLIMATE

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ABSTRACT

Schools in Pakistan largely exhibit traditional and conventional modes of operation wherein there is little scope for innovations. At this juncture, before things become rather stereotyped and hackneyed, we need to evolve innovative strategies and put our educational reconstruction activities on the right track. To handle such problems, we need to introduce numerous innovations in the educational system and find out proper ways and means for diffusing them among different institutions. Studies on the diffusion process and educational changes will certainly help bridge the gap between what is being done and what ought to be done in an institution. The adoption of educational innovations, categories of adaptors and factors affecting adoption in educational settings need to be explored further. These are prepared to be taken up for research in the present study.

Key Words: Instructional Leadership, Behavior, Secondary Schools, Principals, School Climate & Critical Indicator

1. INTRODUCTION

The literature review revealed that ‘organizational climate’ is not merely ordering of materials (both human and physical) but it is one of the most vital aspects of the head-teacher-pupil relationship which depends upon a mixture of free-thought, planning, good communication structure and discipline [Jia, Way, Ling, Yoshikawa, Chen, Hughes, Ke, and Lu (2009); Osher, Bear, Sprague & Doyle (2010) and Uline & Tschannen-Moran (2008)].

On the other hand teacher is influenced by a number of factors pertaining to the organizational set up; including administrative structure, intellectual or academic tradition and practices and state policies and procedures etc. It is this environment which determines to a significant extent, the performance of a teacher in a classroom in the matter of drawing the best out of the children. Therefore, any study of organizational climate is likely to throw light on the environmental factors which give an institution its entity, its character and its uniqueness and which, in turn, leave an indelible impact upon the personalities, adjustment and behavior of pupils who study therein.

The school is a basic formal agency of education meant to (1) develop an individual’s innate power and abilities: (2) equip him with basic skills and knowledge necessities by economic constraints (3) inculcate values and attitudes conducive to honest and responsible participation in social life.

The social environment must develop such individual’s talents and abilities and ensure the best combination of individual and collective work both in and out of the school so that personal and social wastage may be reduced with maximum benefit to the individual and to the society. Referring to this, Cohen, Pickeral & McCloskey (2008) technically described a school as a ‘maintenance organization’. That is to say, it is engaged in the socialization of people and maintaining their numbers by performing the functions of education, indoctrination and training. Further, a school is understandable only at the level of collective behavior.

At the same time, there is an increasing realization that our schools functioning on traditional and individual and social needs. Thus, colossal wastage of physical and manpower resources has been observed. Further, inadequate knowledge and ignorance about innovative practices in

schools are major obstacles in reducing wastage and stagnation and in bringing about educational improvement. To modernize their functioning and to infuse new practices in them we need to study innovativeness in the schools especially, at the higher secondary stage.

Similarly, it is equally important to identify effective teachers. The teacher's primary task is to develop individual's innate powers and abilities and to equip him with necessary skills, values and attitudes so as to make him a useful member of the society. This depends upon his effectiveness. Despite plotters of literature on teacher education, knowledge about teacher 'effectiveness' remains usefully inadequate especially with regards to the system of education, upon which stands our entire education system.

Moreover, great social wastage is likely to secure if schools are not subjected to periodical evaluation on scientific lines as to their environment, performance, provisions of facilities and functioning. Unfortunately, in our country we have till now, emphasized expansion of education and have had little opportunity for consolidation, follow up and evaluation of our educational institutions and inducting innovations in them. Seen in this light, a study of organizational climate, innovativeness of school in relation to teacher effectiveness is likely to have great utility from both personal and social point of view.

The hallmark of any body of knowledge calling itself a science is that any theory it proposes is a testable theory, no matter the test proves true or false. It either adds something new to knowledge or allows it to change our views regarding existing knowledge by presenting facts in a new light. A study of the existing literature on organizational climate reveals that the concept of organizational climate has been dealt in a rather uneven fashion. Cohen, Cardillo and Pickeral (2011), Freiberg (1998) and Cohen, McCabe, Michelli & Pickeral (2009) made some break through by demonstrating the presence of different climates when they termed as "democratic" "authoritarianism" and 'laissez-faire' types. But the nature and extent of relationship of different types of organizational climates with key educational variables like teacher effectiveness, innovativeness, classroom management, academic motivation, pupil's achievement and other learning outcome still remains to be fully explored. In an overall

measurement of progress in this field, the measurement of institutional characteristics, campus climates, and environments has proved to be more complex than anticipated and less amenable to systematic inquiry than foresight suggested because so many features of institutions remain obscure, indeterminate, or otherwise inaccessible to specific, quantified measure.

It is essential to recognize that schools represent not one but several types of organizational climates. They vary according to size, complexity, program, teacher and pupil characteristics and many other factors. It is, therefore, imperative that a meaningful typology of organizational structures is to be developed. The present study is likely to help in this direction by providing insight into patterns of organizational climates at the higher secondary level.

In brief, the shaping of human material depends upon the quality of schools and input variables in form of teachers and innovative program and activities. This study is likely extending substantially the understanding of organizational climate, innovativeness of the school and principal effectiveness. Both schools and teacher education institutions are likely to find the results from the present study to be of considerable practical utility in carrying out their responsibilities in the modern time.

Following are the two research questions were addressed regarding the null hypotheses:

1. Will there be significant differences in teacher-perceived principal instructional leadership behavior between public and private sector schools?
2. Will there be significant differences between teacher and principal perceptions of the principal's instructional leadership behavior?

2. METHODOLOGY

2.1 Sample

The study took place in the city of Karachi, and the sample used consisted of teachers and principals from both public and private sector schools. Furthermore, the schools chosen were selected from a group considered to be similar in nature. Initially, 19 secondary schools agreed to participate in the study. This cohort included 11 schools that were working in public and 8 that were working as private institute. However, the survey was voluntary for both principals and teachers, resulting in only eight public sector schools and seven private schools choosing to participate. Table 1 indicates the schools by group and their respective respondents. A total of 15 principals and 176 teachers responded to the survey.

Table 1
Respondents and Type of Schools

Private schools	Teacher respondents	Public schools	Teacher respondents
A	10	H	8
B	25	I	16
C	11	J	23
D	11	K	4
E	6	L	7
F	3	M	6
G	6	N	19
		O	21
Total respondents	72		104

2.2 Instrumentation

The adaptation version of Melpin and Croft's (1963) Organizational Climate Descriptive Questionnaire was employed for the measurement of organizational climate of the secondary schools. Respondents were asked

to indicate the extent to which each statement characterized his/her school. Responses to each statement were defined by four Likert- type questions namely (1) rarely occur, (2) sometime occur, (3) often occur, and (4) very frequently occur respectively.

Scores can be obtained on eight dimensions. Four of them belong to group behavior characteristics namely, (i) disengagement, (ii) alienation, (iii) esprit, (iv) intimacy while the other four belong to index behavior characteristics namely, (v) psychophysical hindrance (vi) controls (vii) production emphasis, and (viii) humanized thrust respectively.

It is possible to classify organizational climate of the schools on the basis of 'SOCDDQ' into (i) open climate (ii) autonomous climate, (iii) familiar climate, (iv) controlled climate, (v) paternal climate, and (vi) closed climate respectively. For scoring purpose, these categories were assigned a weight-age of 1, 2, 3 and 4 respectively. Score of respondent on eight dimensions were calculated by simple summation of scores on different items.

The reliability of the School Organizational Climate Descriptive Questionnaire was calculated to ensure the practicability of the tool in situations prevailing in the secondary schools of Karachi. Kuder-Richardson Formula (KR-20) was used for calculation of the co-efficient of Reliability (internal consistency) for each of the sub-tests. The co-efficient of Internal Consistency and communality estimates have been shown in table 2.

Table 2
Estimates of Internal Consistency and Equivalence for the
Sub-Test of "SOCDDQ"

Sub-Test	Co-efficient of Internal Consistency	Communality Estimates for Individual Scores
Group Behavior Characteristics		
1. Disengagement	+ .633	+ .333

2. Alienation	+ .602	+ .304
3. Esprit	+ .754	+ .652
4. Intimacy	+ .623	+ .504
Leader Behavior Characteristics		
5. Psycho-physical Hindrance	+ .482	+ .403
6. Controls	+ .624	+ .431
7. Production Emphasis	+ .722	+ .432
8. Humanized Trust	+ .751	+ .654

****P = .01**

Table 2 shows the estimates of internal consistency and equivalence for the sub-tests of the “SOCDDQ”. Co-efficient of internal consistency derived by KR-20 range from + .482 to + .754 and communality estimates from + .403 to + .654. All values have been found ecstastically significant beyond .01 level of significance. This provides adequate proof of high reliability of the tool.

2.3 Design and Statistics

Quantitative methods were used to analyze the responses of the participants, and thus address research questions 1 and 2, and the research questions related to the null hypotheses. Because the study involved the analysis of scores between two groups (principals and teachers and public and private schools), an analysis of variance (ANOVA) was also conducted to determine if there exists statistically significant differences between the two groups.

3. FINDINGS

Schools differ from each other in their organizational climate. Evidence on this fact largely comes from observation of the behavior of people in the school. Nevertheless organization explains and interprets the behavior of people around us in terms of their motives, their role, and the influence that the organization exerts on them.

In order to get a better insight into the difference, if any, between the secondary schools on the different dimensions of organizational climate, One Way Analysis of Variance technique was employed. Table 3 shows the summary of the one way Analysis of Variance carried out on each dimension of organizational climate. Test of homogeneity reveal that in spite of heterogeneity of population sample ($M_1 \neq M_2$) significant difference have also been found due to treatment effects ($S_1 \neq S_2$).

Table 3
Summary of the One Way Analysis of Variance Showing Differences
between Different Types of Schools with Respect to Dimensions of
Organizational Climate

S. No.	Source	Sum of Square	Mean Square	P. Ratio
1.	Disengagement	82.251	41.125	2.077
2.	Alienation	39.041	19.520	4.251*
3.	Esprit	488.252	244.125	11.471**
4.	Intimacy	260.625	130.3125	9.531**
5	Psychological Hindrance physical	33.312	16.656	1.861
6	Controls	83.688	44.044	4.750**
7	Production Emphasis	47.561	23.710	1.900
8	Humanized Thrust	326.250	163.125	3.725*

** $P < .01$ Level

* $P < .05$ Level

Table 4 shows F-Values for the different dimensions of school organizational climate. Significant differences have been found to exist between public and private sector schools with regards to dimensions namely esprit, intimacy and controls respectively ($P < .01$). It indicates that the levels of morale and intimacy among teachers differ significantly in different types of schools. Organizational behavior characteristics of the leaders with respect to controls have also been found to differ significantly between these schools.

Significant differences have also been found with regards to alienation and humanized thrust. This indicates that the emotional distance between the groups (teachers) and the leader (Principal) and Principal's humanized

thrust differ significantly. The F-value for esprit, intimacy and controls have been found to be significant beyond .01 level of significance for alienation and humanized thrust the f-values are significant beyond .95 level of significance.

Further analysis of data was carried out to pin point differences, if any, between different types of schools on organizational climates. The results have been shown in table 5.

Table 4
Significant Differences between the Schools on the Different Dimensions of Organizational Climate

Dimension of school organizational climate	Type of school	Mean	S.D.
Disengagement	Public Sector Schools	20.55	3.60
	Private Sector Schools	21.00	5.00
Alienation	Public Sector Schools	8.42	2.18
	Private Sector Schools	8.33	1.94
Esprit	Public Sector Schools	19.96	4.15
	Private Sector Schools	22.44	4.76
Intimacy	Public Sector Schools	17.34	3.40
	Private Sector Schools	18.94	3.68
Psycho-physical hindrance	Public Sector Schools	13.04	2.90
	Private Sector Schools	13.59	3.07
Controls	Public Sector Schools	13.01	2.98
	Private Sector Schools	13.48	3.18
Production emphasis	Public Sector Schools	17.28	4.51
	Private Sector Schools	18.04	3.21
Humanized trust	Public Sector Schools	34.15	7.00
	Private Sector Schools	34.91	7.21

*P< .05

**P< .01

Table 5
Significant Difference between the Schools on the Different
Dimensions of Organizational Climate

Dimension of School Organizational Climate	Groups under Comparison	C.R.
Disengagement	Public VS Private Sector Schools	2.55*
Alienation	Public VS Private Sector Schools	1.24
Esprit	Public VS Private Sector Schools	4.96**
Intimacy	Public VS Private Sector Schools	4.00**
Psycho-physical Hindrance	Public VS Private Sector Schools	1.62
Controls	Public VS Private Sector Schools	1.34
Production Emphasis	Public VS Private Sector Schools	1.69
Humanized Trust	Public VS Private Sector Schools	.95

*P< .05

**P< .01

It can be seen that significant difference have been found between the public and private sectors' schools with respect to disengagement, esprit and humanized trust ($P<.05$) and on intimacy and controls ($P<.01$) respectively. High morals and intimacy between teachers have been observed. The heads of the public sector schools have been found to be less considerate and more impersonal as compared to the heads in the private sector's schools. Teachers in the public sector's schools, on the other hands, have been found to be more disengaged in comparison to their counter parts.

Table 6 shows standard scores on disengagement, alienation, intimacy, psychological hindrance, controls, and production emphasis humanized thrust variables of organizational climate.

Table 6
Profiles of Different Types of Schools Based on Their Organizational Climate

Types of school	Disengagement	Alienation	Esprit	Intimacy	Psychohindrance	Controls	Production emphasis	Humanized thrust
Government schools	50	49	48	48	49	48	47	49
Private schools	45	47	56	31	49	49	51	54

The findings show the distinct and marked differences appear in the field of esprit and controls. In other words, the government schools are characterized by lower morals and higher than the levels of expected in the ideal type (open climate). Even though similar trends have been observed between the two profiles with regards to organizational climate dimensions namely, disengagement, alienation, production emphasis, and humanized thrust respectively, yet the government schools did not strictly conform to the prototypic one. This implies that development of liberal, democratic and human attitudes on the part of the heads on one hand and intimacy as well as job satisfaction on the other are needed to be encouraged to lead these schools towards the idealistic one.

To prepare a profile of organizational climate for each school, the raw score converted into doubly standardized scores, first by normative standardization and then by inactive standardization procedure. Normatively, each sub-test score was standardized across the total sample of schools according to the mean and standard deviation of the total sample for the sub-test. Inactively, each sub-test score was standardized with respect to the mean and standard deviation of the profile score for each school. For standardization procedures a mean of 50 and a standard deviation of 10 were used. Eight standard starts representing the schools' profile was thus derived.

To assign climate type to each school of the sample, each of the profile was compared with the six prototype profile and a profile similarity score was calculated for each school. This score helped in determining to what extent each school profile was congruent with the prototype profile which characterized each of the six climates. Thus, similarity scores were worked

out by computing the absolute difference between each score in a school's profile and the corresponding score in the first prototype profile. This process was repeated. A low score indicated that the two profiles were highly similar whereas, a large score showed that the profiles were dissimilar. Thus, each school was classified after matching the score with the prototype scores.

Table 7
Standard Scores on Different Dimensions of Organizational Climate in Different Schools

Code (Schools)	Disengagement	Alienation	Espri t	Intimacy	Psycho-physical hindrance	controls	Production emphasis	Humanized thrust
A.	48	49	46	53	45	45	46	51
B.	52	49	50	46	49	50	47	52
C.	52	49	50	46	49	50	47	52
D.	52	48	48	50	54	50	51	53
E.	49	46	49	44	43	50	45	47
F.	51	48	45	43	58	49	46	47
G.	54	52	48	52	53	47	52	44
H.	49	48	50	52	50	44	40	44
I.	53	58	59	49	50	54	60	60
J.	46	45	47	48	50	46	50	47
K.	52	49	46	50	47	47	42	46
L.	45	50	52	45	56	53	56	49
M.	44	49	43	56	54	53	48	42
N.	56	51	46	44	45	48	52	54
O.	46	47	61	53	57	51	50	46

Table 8
Profiles of Organizational Climate Sampled of the Schools

Dimension of organizational climate	Disengagement	Alienation	Esprit	Intimacy	Psychophysical hindrance	controls	Production emphasis	Humanized thrust
Open Climate	52	50	59	53	52	47	52	55
Autonomous Climate	46	51	53	55	54	50	49	47
Familiar Climate	58	51	59	51	46	59	51	53
Controlled Climate	15	47	49	47	51	50	51	51
Paternal Climate	55	49	47	48	49	49	48	49
Closed Climate	53	56	41	47	52	54	49	45

The comparative study of the profiles of obtained organizational climates vice-a-vie the prototype profile, of organizational climates derived by the test maker was undertaken to find out significant differences, if any, between the two profiles.

The findings show, the comparative profile of the obtained open organizational climate in cases of the school Karachi region vice-a-via the delineated prototype of open climate by the test maker. The two profiles show significant differences on the different dimensions of organizational climate. A higher disengagement, alienation, intimacy and controls on one hand and lower esprit and humanized thrust than the level of prototype have been found in these schools. This indicates that even-though the climate of open type yet the teachers are not ideally geared to the lack at hand. A looser emotional distance between the group and the leader (head, and, at the same time, among the group members, has been observed). Similarly, higher controls with less human consideration by the head and lower moral among the teachers as compared to the prototype have been found. This indicates that the school with open climate in Karachi region is it lowers level of openness than the prototype.

Another analysis show the comparative profiles of the obtained autonomous climate in the case of the secondary schools of Karachi region, via-a-via the prototype for the autonomous climate delineated by the test maker. A higher disengagement production emphasis and humanized thrust on the one hand and lower esprit and psycho-physical hindrance on the other hand than the level found in the prototype can be observed this indicate that the autonomous schools of Karachi region show looser tendency towards the task, at hand, inner feedback from the staff, lower morale among the teachers and lesser human consideration by the head than the same in the prototype.

The analysis made in the comparative profile of the obtained familiar climate in the case of the secondary schools of Karachi region vie-a-vie the prototype of the familiar climate derived by the test maker. Difference between the two profiles has been observed. A higher disengagement, psycho-physical hindrance on one hand anti lower alienation, dispirit, production emphasis on the other hand in these school have been found in the study than the prototype of the familiar climate.

This indicates that the teachers in these schools are looser geared to the tasks at hand. A lower morale among teachers and higher psycho-physical hindrance than the prototype profiles of familiar climate have been found. These schools have also shown higher human consideration and lower alienation than the prototype. This implies that on two dimension of 0.0. namely alienation and humanized thrust, the obtained result, are higher while on other dimensions the prototype profile of familiar climate has been found better.

The data show the comparative profile of the obtained controlled climate in the secondary schools of Karachi region vie-a-vie the prototype profile of controlled climate. Marked difference between the two profiles has been observed with regards to organizational climate dimension namely; intimacy, controls, production emphasis and humanized thrust respectively. When compared to the prototype profile of controlled climate more friendly relation and human consideration have been found in the case of the schools of Karachi region. Somewhat identical trends between the two profiles have been found with regards to disengagement, alienation and esprit respectively. On the whole, the obtained profile is somewhat lower than the prototype one.

The comparative profiles of the obtained paternal climate in the case of secondary schools of Karachi region vis-a-vis the prototype profile of paternal climate were also analyzed. Marked differences between the two profiles have been found on the different dimensions of organizational climate namely disengagement, psycho-physical hindrance, controls, production emphasis and humanized thrust respectively. A lower psycho-physical hindrance, disengagement and alienation on one hand and higher esprit and intimacy on the other hand placed these sampled schools at a higher level.

Data show the comparative profile of the obtained closed climate in the case of secondary schools of Karachi region vis-e-vis the prototype profile of closed climate. Marked differences have been found between the two profiles. With regards to alienation, dispirit intimacy, psycho-physical hindrance controls and production emphasis respectively. A higher dispirit and intimacy among the teachers on one hand and lower psycho-physical hindrance and production emphasis on the other hand have been found than the levels obtained in the prototype of closed climate. This indicates that the schools under investigation with closed climate have been found to be somewhat better than the prototype one.

The analysis reveals that even-though, overall trends of the profiles are similar yet marked differences have been found on the different dimensions of organizational climate. This indicates that within the given organizational climate, there may be various levels and variations. This establishes the hypothesis that schools differ in their organizational climate even within the specified climate. In other words, every institution has its own organizational climate which gives it a distinct personality.

4. CONCLUSION

The following conclusions have emerged from the study of school organizational climate.

- (1) Significant differences in the organizational climate have been found to exist between the government schools and the private sector schools with regards to dimension namely esprit, intimacy, controls and humanized thrust respectively. The private sector schools have been characterized by a significantly high morals and intimacy among teachers while disengagement has been significantly higher in the

public sector schools. The heads of these schools have been found to exercise higher controls with lesser consideration as compared to their counterparts in the public sector schools.

- (2) Both cohort schools have been found to differ significantly from each other in their organizational climate with respect to dimensions namely esprit and intimacy.
- (3) Significant differences have been found with regards to dimensions namely alienation, esprit, controls and humanized thrust respectively. The results show that there are significantly high disengagement, alienation and morals respectively in the public sector schools. Significantly higher controls have been found in the private schools along with significantly lower thrust respectively. It implies that teachers in private schools perceive their heads as more bureaucratic, impersonal but considerate in their behavior.
- (4) Disengagement has been found to be significantly higher in the public schools as compared to the same in the private schools. Thus, the private schools have been found to exhibit significantly higher degree of engagement with respect to task in hand as compared to the public sector schools.
- (5) Private schools have shown significantly low alienation in comparison to the government schools in their organizational climate. It indicates that the emotional distance between the group and the leader, and at the same time, among the group members is significantly low in the private schools as compared to the same in the government schools.
- (6) Significant differences have been found to exist between the private schools and the government schools in their organizational climate with regards to intimacy. The private school has been characterized by significantly higher intimacy among the teachers as compared to their counterparts in the government schools. This implies that the teachers in private schools enjoy high friendly social relations with each other's as compared to their counterparts in the government schools.
- (7) Significantly less psycho-physical hindrance in the organizational climate has been found in the private schools as compared to same in

the government schools respectively. This indicates that the private schools have been found to be significantly more democratic and receptive to feedback as compared to the government schools.

- (8) Significant differences have been found to exist between the private schools and the government schools in their organizational climate, with regards to controls. The private schools have been found to exercise greater amount of controls as compared to the government schools.
- (9) Significant differences have been found to exist between the government schools and the private schools respectively. On the other, in their organizational climate with regards to production emphasis. The government schools have shown significantly higher production emphasis as compared to the private schools. This indicates that the heads of the government schools have not been found sensitive to the feedback from their staff.
- (10) The private schools and the government schools have been found to differ significantly from each other in their organizational climate with regards to humanized thrust. The private schools have been found to be significantly more humanistic as compared to their counterparts.
- (11) The higher secondary schools of Karachi region have been found to differ significantly in terms of their organizational climate. The organizational climates were found as very from 'open' to 'closed' with same schools identified with autonomous families, controlled and paternal organizational climate respectively. This indicates that each school has a unique identity and generalization based on "type" of school which is taken traditionally in studies, may not be sound criterion to discriminate between them with regards to their organizational climate.

5. IMPLICATIONS

In the light of results obtained in the present investigation the following implications for practical purposes can be derived:

- 1) Despite the complexity and intangibility of organizational climate, some programs can be made to identify the profiles of organizational climates which will improve our understanding of organizational climates and provide useful information on the relative levels of performances of the high and higher secondary schools.
- 2) Organizational climate of private schools have been found better than government schools on almost all dimensions of organizational climate. High disengagement, alienation, psycho-physical hindrance, can role and production emphasis hamper the efficiency of government schools. This suggests that the private instruction deserve a better deal than what they are setting at the present.
- 3) Schools in the Karachi region, particularly the Government schools, generally lack innovativeness in instructional practices, curricular and co-curricular activities, human relations and communication and school programs. This calls for the provision of proper incentives and motivation for innovational activities in the schools.
- 4) Private schools are more enthusiastic and respective to innovations as compared to government schools. Thus, it can be suggested that proper incentives and guidelines be given in this context to government schools.
- 5) Lack of sound human relations and communication patterns further check the introduction of innovations in government schools. These areas need improvement.
- 6) Insignificant contribution of professional training to those teachers makes it necessary for us to evolve a fundamental education so as to make it adequate and varied and to involve every teacher with his professional growth as also to increase the effectiveness of these programs in terms of their relative effect on the efficiency of classroom instructions.

- 7) The present study indicates that the open organizational climate and innovativeness provide a setting in which teacher can increase his/her efficiency.

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A STUDY OF LEARNING FACILITIES AND LEARNING ENVIRONMENT IN ECE CLASSROOM PURSUANCE OF ECE CURRICULUM 2007 IN PAKISTAN

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ABSTRACT

This study focuses on investigating learning facilities and learning environment in Govt. Primary schools of District Haripur in order to seek compatibility of these factors with the essence of ECE curriculum 2007. The research questions of the study were: a) to what extent ECE classrooms have been provided physical facilities to implement the ECE curriculum 2007? and b) how for the learning environment in ECE classrooms in Primary schools is compatible with the requirements of ECE curriculum 2007? To have an insight into the answers to these research questions, pre-school classes of 120 primary schools were observed by using an observation checklist prepared in the light of ECE curriculum 2007. The analyzed data reflected various deficiencies regarding physical facilities and learning environment pre-requisite for implementing ECE curriculum 2007.

Key words: Early Childhood Education, Learning Facilities, Learning Environment

1. INTRODUCTION

Early Childhood Education (ECE) is a formal teaching and caring of young children by people other than their family or in settings outside of the home. 'Early childhood' is usually defined as before the age of normal schooling - five years in most of the countries. In Khyber Pakhtunkhwa (KP) the age for admission in school is 5 years and the class in which s/he is admitted is *katchi* class. As ECE/*katchi* is prior to class 1 so the age for ECE is 3 to 5 years of age.

National Education Policy (1998-2010) declared ECE as a *Katchi*/Pre-Primary Class in Primary Schools to make six-year formal primary education program (Government of Pakistan, 1998). For this purpose, separate funds were provided in the Education Sector Reforms Program for ECE and was also linked with the National Plan of Action on Education for All as Pakistan is committed to the Dakar Framework of Action, the first goal of which is to expand and improve comprehensive ECE for all children primarily for those who are most vulnerable and disadvantaged'. National Education Policy (2009) proposed to improve delivery of ECE in the country through broader access, improved quality and improved governance. In the past, ECE has not been formally offered in government schools of Pakistan. Some parents used to send their younger kids as un-admitted with their elder brothers and sisters in '*katchi*' just to acquaint them formal schooling. These un-admitted kids were taught through some part of class-1 book (Government of Pakistan, 2009).

Early Childhood Education (ECE) can be improved through the provision of better training of teachers, required resources and support of educationists related to this field (Government of Khyber Pakhtunkhwa, 2010). ECE students are facing retention problems in public sector institutions due to lack of trained, competent ECE teachers and non-conducive environment (Malik, 2012). This study focuses on investigating learning facilities and learning environment in Govt. Primary schools of District Haripur in order to seek compatibility of these factors with the essence of ECE curriculum 2007. According to Annual Status of Education Report (ASER), 2012 pre-school enrollment (3-5 years) was 37.1%, gradually approaching the National Action Plan's (NAP) target of 50% enrollment in pre-school by 2015. Highest enrollment in this age group was 56.1% in ICT and the lowest in Balochistan with 22.3%. In

Khyber Pakhtunkhwa rural pre-school enrollment (3-5 years) was 35.1%, and in district Haripur for the same age group was 56.6%, which was highest among all districts of the province (ASER, 2013).

Early Childhood Education (ECE) Prep or *Katchi* classes are in the age of 3-4 year children. There is an increase of 1.1% in Pre-Primary enrolment (9.51 million) in 2011-12 as compare to 2010-11 (9.41million) is noticed and 4.3% increase is estimated (9.92 million) in 2012-13 (Government of Pakistan, 2013).

2. RESEARCH QUESTIONS

The research questions of the study were: a) to what extent ECE classrooms have been provided with physical facilities to implement the ECE curriculum 2007? and b) how for the learning environment in ECE classrooms in Primary schools is compatible with the requirements of ECE curriculum 2007?

3. RESEARCH METHODOLOGY

To have an insight into the answers to these research questions, pre-school classes of 120 primary schools were observed by using an observation checklist prepared in the light of ECE curriculum 2007. The analyzed data reflected various deficiencies regarding physical facilities and learning environment pre-requisite for implementing ECE curriculum 2007.

A classroom observation checklist (CRO) was constructed to record the observation of following: Physical Facilities, Material and Equipment, Learning Corners, Daily Routine, Students Record (Portfolio, Progress Report), Classroom Environment, Teaching Method, Teacher Students Relationship, and Parental Involvement.

4. FINDINGS

Table 1
Physical facilities, material and equipment

	Indicator	Strength	Weakness
a	Classroom Specific classroom, clean and safe, attractive, having sufficient space for indoor physical activities center place is available for group work.	Specific classroom for katchi class was available in 38 (31.66%) schools and having sufficient space for indoor physical activities center place is available for group work. These were JAICA model schools and Govt. English Medium Schools.	In 33 (29.5%) schools, children of different classes were sitting together in a single classroom. These classrooms were over crowded and congested. In 49 (40.8%) schools, classrooms were not available; students were sitting in school veranda or courtyard. In some schools, students were wondering aim Lesley in school.
b	Furniture Small, Child sized, arranged in child centered manner/ <i>dari</i> for greeting time.	In 32(26.66%) schools small and child-sized furniture and <i>daries</i> were available. These were JAICA model schools and Govt. English Medium Primary Schools.	In 27(22.5%) schools conventional and inappropriate furniture was available for young kids and not arranged in child centered- manner In 32(26.66%) schools, children were sitting on tats while in 29(24.16%) schools, students were sitting on floor

Specific classrooms for katchi classes were available in 38(31.66%) schools and having sufficient space for indoor physical activities, center place was available for group work. These were JAICA model schools and Govt. English medium schools. In 33 (29.5%) schools, children of

different classes were sitting together in a single classroom. These classrooms were over crowded and congested. In 49 (40.8%) schools, classrooms were not available; students were sitting in school verandas or courtyards. In some schools, students were wondering without any purpose in schools.

In 32(26.66%) schools small and child-sized furniture and dairies were available. These were JAICA model schools and Govt. English medium schools. In 27(22.5%) schools, furniture was available but it was conventional and was in appropriate for young children. Furniture were not arranged in child centered- manner. In 32(26.66%) schools, children were sitting on tats while in 29(24.16%) schools, students were sitting on floor.

Table 2
Learning material, programs and activities

	Indicator	Strength	Weakness
c	Learning Material Charts, Flash cards, Blocks, Beads, Models,	In 32(26.66%) schools learning material was available teachers were using them appropriately.	In 57(47.5%) schools, limited learning material was available, teachers were facing difficulty in using due to missing objects. In 31(25.83%) schools, learning material was not available.
d	Health and Hygienic Nutrition program. Medical Checkup Hand Washing and Tooth brushing practice School Location Class room Lighting Ventilation Safe drinking Water Cleanliness of Toilets	In 25(20.83%) schools, students were neat and clean wearing tidy uniform. 45(25%) schools were located in polluted free environment. 63(52.5%) schools had safe drinking water.	None of school has health or nutrition program. In rural areas children go outside to buy and eat very unhealthy food items. Cleanness of classes were very poor due to absence of ayahs, a chowkidar performs all duties. In 35(29.16%) schools, toilet was present but not working. In 57(47.5%) safe drinking water was not available.

e	Physical Activities	In 43(35.83%) schools play grounds were available where children were playing different games.	In 77(64.16%) schools no play ground was available due to multi-grade teaching, teachers were not able to engage children in different physical activities.
f	Copy of the curriculum.	It was available in 5(4.16%) schools. Teachers who received ECE training were aware of the NCECE 2006-07.	In 115(95.83%) of the schools copy of NCECE 2006-07 was not available, available teachers can not differentiate between syllabus and curriculum

In 32(26.66%) schools learning material was available, while in 57(47.5%) schools learning material was available to some extent and teachers were facing difficulty due to lack of skills and proficiency. In 31(25.83%) schools learning material was not available. Regarding observations of Health and Hygienic conditions it was observed that in 25(20.83%) schools, students were neat and clean wearing tidy uniform. 45(25%) schools were located in polluted free environment and 73(60.83%) schools had safe drinking water.

All schools included in samples have no health or nutrition program. Poor sanitary conditions were observed in 35(29.16%) most of the toilets were not in the working conditions. Lack of ayah (female servant) lead to un hygienic and un sanitary condition. In rural areas children go to home during breaks to use toilets and majority of them did not return. In all public primary schools, a male servant (chowkidar) performs all duties. In 57(47.5%) safe drinking water was not available.

In observations regarding the teacher parent relationship, it was found that Parent Teacher Association (PTA) were available in all schools. Active participation of parents was reported in 25(20.83%) schools while in 95 (79.27%) schools, poor participations of parents were reported. Parents do not visit schools regularly especially in rural areas.

In 43(35.83%) schools play grounds were available where children were playing different games, while in 77(64.16%) schools no play ground was observed due to multi-grade teaching, teachers were not able to engage children in different physical activities.

Copy of the curriculum was available in 5(4.16%) schools, as these teachers revived ECE training. In 115(95.83%) schools copy of NCECE 2007 was not available.

Table 3
Learning corners

	Indicator	Strength	weakness
i)	Language corner Equip with material related to increasing vocabulary and learning, reading skills. All materials are labeled and accessible to children.	Language corner was available in 14(11.64%) schools, including JAICA model and in few English medium primary schools.	In 57(47.5%) schools, language corner was available but below the standard given in NCECE 2007, stored in cupboards. In 49(40.83%) schools, language corner was not available, as students were sitting in <i>varanda</i> .
ii)	Library corner Story books, Rhyme books, and picture of animals and plants	Library corner was available in 14(11.66%) schools, including JAICA model and in few English medium primary schools.	In 106(88.33%) schools, library corner was not available.
iii)	Art Corner Colours, Brushes, White Sheets, Tracing Paper, Empty Shoe Boxes, Beads, Straws, etc.	In 32(26.66%) schools, art corner was available.	In 88(73.33%) schools, no such corner was available.
iv)	Maths Corner Flash Cards of no 0-9, blocks, chart having different geometrical shapes, colours, sizes.	In 22(18.33%) schools, Maths corner was available.	In 15(12.5%) schools, Maths corner was available but shelves were locked due to fear of audit. In 83(69%) schools, Maths corner was absent.
v)	Science Corner Models and picture animals and plants, charts of parts of body.	It was available in 15(12.5%) schools JAICA model schools and Govt. English Medium Schools.	In 75(62.5%) schools no such corner was available. 30(25%) schools have charts of animals, plants and body parts.

vi)	Home Corner The home corner consists of various kitchen, utensils, clothes, small furniture, dolls and doll houses.	It was available in 5 (4.16%) schools no such corner was available.	In 115 (95.83%) schools no such corner was available.
d	Children display Children's art work, Handwriting, Models prepared by teachers	In 10(8.33%) schools, children display was present specially art work.	In 110(91.66%) schools, children's display was not available.

Library corners were observed in 14(11.66%) schools including JAICA model schools and in few English medium primary schools, while in 106(88.33%) schools, library corners were not observed. In 32(26.66%) schools, art corners were observed, while in 88(73.33%) schools, no such corners were observed. In 22(18.33%) schools maths corners were observed, while in 15(12.5%) schools, maths corners were observed, but shelves were locked due to fear of audit. In 83(69%) schools maths corners were absent. Science corners were observed in 15(12.5%) schools these were JAICA model schools and Government English Medium Schools, 30(25%) schools have charts of animal's plants and body parts, while in 75(62.5%) schools no such corners were observed.

Home corners were observed in 5 (4.16%) schools, while in 115 (95.83%) schools no such corners were observed. In 10(8.33%) schools, children's displays were observed specially their art work, while in 110(91.66%) schools, children's displays were not observed.

Table 4
The Daily Routine

	Indicator	Followed in schools	Not Followed in schools
a	Dua/National Anthem	32(26.66%)	88(73.34%)
	15 minutes	15(12.5%)	Due to late arrival of children 105(87.5%)
	Greeting Circle		
	15 minutes	5(4.16%)	115(95.83%)
	Group Work Time		
	40 minutes	7(5.83%)	113(94.16%)
	Outside Time		
	30 minutes	85(70.83%)	35(29.16%)
	Snack Time		
	30 minutes		
b	Plan-Work-Cleanup-Review 90 minutes		
	-Planning	2(1.66%)	118(98.33%)
	15 minutes		
		11(9.16%)	109(90.83%)
	-Work/Gosha Time		
	45 minutes	2(1.66%)	118(98.33%)
	-Clean-up Time		
	10 minutes	2(1.66%)	118(98.33%)
	-Review Time		
	20 minutes	11(9.16%)	109(90.83%)
	Story and Rhyme Time 20 minutes		

Dua/National Anthem (15 minutes), Followed in 32(26.66%) schools. Due to late arrival in schools, majority of children did not attend Dua and National Anthem. Greeting Circle (15 minutes), Followed in 15(12.5%) schools. Not observed in 105(87.5%) schools. Group Work Time (40

minutes), Followed in 5(4.16%) schools. Not observed in 115(95.83%) schools. Outside Time (30 minutes), Followed in 7(5.83%) schools. Not observed in 113(94.16%) schools.

Snack Time (30 minutes) Followed in 85(70.83%) schools. Not observed in 35(29.16%) schools. Plan-Work-Cleanup-Review (90 minutes), Followed in 2(1.66%) schools. Not observed in 118(98.33%) schools. Planning (15 minutes), Followed in 2(1.66%) schools. Not observed in 118(98.33%) schools. Work/Gosha Time (45 minutes), Followed in 11(9.16%) schools. Not observed in 109(90.83%) schools.

Clean-up Time (10 minutes), Followed in 2(1.66%) schools. Not observed in 118(98.33%) schools. Review Time (20 minutes), Followed in 2(1.66%) schools. Not observed in 118(98.33%) schools.

Story and Rhyme Time (20 minutes), Followed in 11(9.16%) schools. Not observed in 109(90.83%) schools. Check lists of children's progress were observed in 2(1.66%) schools. Not found in 118 (98.33%) schools.

Table 5
Students Record (Portfolio, Progress Report)

	Indicator	Followed in schools	Not Followed in schools
a	Check list of children's progress	Found in 2(1.66%) schools.	Not Found in 118 (98.33%) schools.
b	Portfolio of children's progress	Found in 5(4.16%) schools.	Not Found in 115(95.83%) schools
c	Progress report for parents	It was present in 63(52.5%) school.	In 57(47.5%) schools, teachers announced results of students in school assembly.

Check list of children's progress was found in 2(1.66%) schools and was not found in 118 (98.33%) schools. Portfolio of children's progress was observed in 5(4.16%) schools Not Found in 115(95.83%) schools. Progress reports for parents were observed in 57(47.5%) schools; teachers announced results of students in school assembly.

Table 6
Classroom environment

Indicator	Strength	Weakness
Active Learning Children have active experiences with people, materials, events and ideas. They are encouraged to make choices about materials and activities. They explore, ask, questions, interact with class mates and adults.	It was available in 11(9.16%) schools.	In 109(90.83%) schools no such learning environment was found. Classroom available seemed very teacher directed, the majority of teacher available used rote drill instructions. Teacher reported that activities were used occasionally due to time available

Active learning was observed in 11(9.16%) schools, while in 109(90.83%) schools no such learning environment were observed, Classrooms seemed very teacher directed, the majority of teachers were using rote drill instructions. Teachers reported that activities were used occasionally due to lack of time as they are teaching multi-grade.

Students with learning` disabilities and special children were totally ignored, teachers reported they are not aware of with the strategies of teaching such groups.

Table 7
Teaching methodology

	Indicator	Strength	Weakness
	Activity Based Child Oriented	In 25(20.83%) schools, activity method of teaching was available as according to teachers they had short training related to these teachers were trained in early childhood ECE.	In 70(58.33%) schools, teachers were teaching through books, in 25(20.83%) schools, teachers were using black board, children of different grades were sitting together in a single class rooms. Teachers told that they did not have time for activity method of teaching.

In 25(20.83%) schools, activity method of teaching was observed. According to those teachers they had short training related to early childhood education. In 70(58.33%) schools, teachers were teaching through books, in 25(20.83%) schools teachers were using black boards. Children of different grades were sitting together in a single class rooms those teachers reported that they had no time and equipment for performing different activities.

Table 8
Teacher-child relationship

Indicator	Strength	Weakness
Teachers child interaction Teacher interacts with children in calm, respectful tones. They encourage children pay attention to children by smiling making eye contact, getting down to children's level, listening attentively.	In 30(25%) schools, where specific teacher was available for katchi class, healthy and warm teacher child interaction was available.	In 90 (75%) classrooms, where multi-grades were setting together and a shared teacher was teaching classroom was noisy teacher was uncomfortable and looking upset. Poor teacher child interaction was available children also reported corporal punishment in few schools. Teachers were shouting using harsh words. A caution used by the teachers most of the time for the children was "stop talking".

In 30(25%) schools, where specific teachers were available for katchi class, healthy and worm teacher child interaction were observed. In 90(75%) class rooms where multi-grade was setting together and shared teachers, were teaching classroom was noisy teachers were uncomfortable and looking upset. Poor teacher child interaction was observed children also reported corporal punishment in few schools. Teachers were shouting using harsh words. A caution used by the teachers most of the time for the children were “stop talking”. In 50% schools offspring of teacher’s age three months to three years were present in classrooms along with their mothers (teachers).

Table 9
Teacher-parent relationship

	Indicator	Strength	weakness
	Teacher Parent Relationship	Parent Teacher Association is available in all primary schools.	Parents do not visit schools regularly especially in rural areas.

In all primary schools Parent Teacher Association was available but parents do not visit schools regularly especially in rural areas

5. DISCUSSION

- Specific classrooms and small and child-sized furniture or *daries* for *katchi* classes were available in only one third of total sample and these schools were either JAICA model or Government English medium schools and rest of the schools have no sufficient space for indoor physical activities or center place for group work and available furniture was either conventional and inappropriate for young children or was not arranged in child centered-manner or children were sitting on tats or on floor.
- Regarding observations of Health and Hygienic conditions, it was observed that in some schools, students were neat and clean wearing tidy uniform, schools were located in polluted free environment, in more than half schools had safe drinking water. All schools included in samples have no health or nutrition program. Poor sanitary conditions were observed, most of the toilets were not in the working conditions. Lack of ayah (female servant) lead to un hygienic and un sanitary

condition. In rural areas children go to home during breaks to use toilets and majority of them did not return. In all public primary schools, a male servant (chowkidar) performs all duties.

- In some schools play grounds were available where children were playing different games, while in majority of schools no play ground was available due to multi-grade teaching, teachers were not able to engage children in different physical activities.
- Copy of the curriculum was available in very small number of schools, as these teachers received ECE training.
- Language, library, math, Science, home and display corners were available JAICA model schools and in few English medium primary schools, while in other schools either not available or of low standard
- Dua/National Anthem (15 minutes), Greeting Circle (15 minutes), Group Work Time (40 minutes), Outside Time (30 minutes), were followed in some schools whereas Snack Time (30 minutes) was followed majority of schools.
- Plan-Work-Cleanup-Review (90 minutes), was followed in very small number of schools and not observed in majority of schools.
- Portfolio of children's progress was followed in very small number of schools and not observed majority schools whereas Progress reports for parents were observed majority of schools but teachers announced results of students in school assembly.
- Active learning was observed in very small number of schools and not observed majority schools, Classrooms seemed very teacher directed, the majority of teachers were using rote drill instructions. Teachers reported that activities were used occasionally due to lack of time as they are teaching multi-grade. Students with learning` disabilities and special children were totally ignored, teachers reported they are not aware of with the strategies of teaching such groups
- In some schools, activity method of teaching was observed. According to those teachers they had short training related to early childhood education. In majority schools, teachers were teaching through books, schools teachers were using black boards. Children of different grades were sitting together in a single class rooms those teachers reported that they had no time and equipment for performing different activities.
- In some schools, where a specific teacher was available for katchi class, healthy and warm teacher child interaction were observed. In

majority of class rooms where multi-grade was setting together and a shared teacher was teaching classroom was noisy teachers were uncomfortable and looking upset. Poor teacher child interaction was observed children also reported corporal punishment in few schools. Teachers were shouting using harsh words. A caution used by the teachers most of the time for the children were “stop talking”. In half of the schools offspring of teacher’s age three months to three years were present in classrooms along with their mothers (teachers).

- In observations regarding the teacher parent relationship, it was found that Parent Teacher Association (PTA) were available in all schools but parents do not visit schools regularly especially in rural areas.

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THE EXPERIENCES OF PERSONS WITH DEAFNESS AT WORKPLACE

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ABSTRACT

The major purpose of this survey study was to explore difficulties faced by individuals with deafness at workplace. A self-developed structured interview containing twenty-two (22) open and closed ended questions was developed. The reliability of instrument (Cronbach alpha) was 0.67. A sample of thirty four (34) individuals with deafness (males=31 and females=03) were selected through snow ball sampling technique from two major cities of the Punjab i.e., Lahore and Bahawalpur. Data were analyzed by using SPSS. Frequencies were run to see an overall picture of difficulties encountered by individuals with deafness at place of work. Major findings revealed that individuals with deafness are not employed according to their vocational skills and getting low salaries. They reported that physical and social environment of organization, attitudes of head and colleagues is good. They highlighted many difficulties such as workplace is far away, poor reward and appraisal systems, insufficient promotion and training opportunities and nonexistence of assistive devices at workplace. The study recommended that A fair system of performance appraisal, awards and promotion should be introduced and practiced in the organization and communication barriers for deaf employees may be reduced by using assistive listening devices, sign language and sign language interpreter during special meeting sessions.

Keywords: Individuals with deafness, Workplace, Performance appraisal, Assistive listening devices.

1. INTRODUCTION

Hearing impairment is considered to be the most prevalent congenital abnormality in newborns and is more than twice as prevalent as other conditions that are screened for at birth, such as sickle cell disease, hypothyroidism, phenylketonuria, and galactosaemia. It is one of the most common sensory disorders and is the consequence of sensor neural and/or conductive malfunctions of the ear. Children who have mild or unilateral permanent hearing loss may experience difficulties with speech understanding, especially in a noisy environment, as well as problems with educational and psycho-social development. Children with hearing impairment frequently experience speech-language deficits and exhibit lower academic achievement and poorer social-emotional development than their peers with normal hearing (Shemesh, 2010).

Communication is the major problem of persons with hearing impairment which is essential skill in all aspects of life especially when interacting with hearing world. This deficiency affects the working of persons with deafness at their work places. Persons with normal hearing have similar problem of communication because they do not expert in sign language, therefore, as a result they also fail to communicate official requirement to them. According to an Italian study conducted in 2008 working adults with mild or moderate hearing impairment may be adversely affected at work unless they use hearing aids. The sample of the study was comprised on 73 people with hearing loss and 96 people with normal hearing. The result of the study revealed that those with hearing loss experienced greater problems in the workplace, emotionally as well as socially. This was demonstrated by a higher prevalence of signs of depression, anxiety, sensitivity and hostility in the hearing impaired group than in the group of people with normal hearing. It is found that emotional effects of hearing loss generally resulted in hearing impaired workers having difficulty functioning in socially challenging situations commonly found at work place.

Another research report persons with hearing loss in the workplace by Matthews (2014) describes the experiences of 27 people with hearing loss. Through in-depth interviews the investigator found that the culture of an organization has the biggest impact on the experience that someone with hearing loss has in the workplace. The organization's values and beliefs

influence the support mechanisms available as well as the way that managers and colleagues react to someone with hearing loss. Work environment hearing loss can have an immediate impact on communication but it is important that people feel confident in asking for adjustments. Meetings were a problem for most participants due to problems such as background noise and difficulties in understanding oral mode of communications. Simple changes can be made to minimize these problems, for example by using equipment such as loop systems and personal listeners, or even using communication support such as a speech-to-text-reporter. It is also found that adjustments and support assistive listening services are generally focused on the provision of hearing aids and do not provide a holistic service with advice and support tailored to the work. However, there was a general lack of awareness among both the person with hearing loss and their employers.

Like in other fields of life, persons with hearing impairment face problems at their job place. According to Moores (2001) students with hearing impairment experience low self-esteem, communication problems, transportation problems, resistance factors by the company to giving up government support, ineffective interpersonal relationship etc. Furthermore, they are considered as inflexible workers, having inadequate vocational training by the institutions.

2. METHODOLOGY

Methodology is discussed under the following headings:

2.1 Participants

The sample consisted of 34 participants, out of which 31 were male employees and 3 were female employees. Out of thirty four employees 22(64.7%) were permanent 09(26.5%) were working on contract and 3(8.82%) were doing their own work (business).

Respondents were asked to report their level of hearing loss across four categories: mild, moderate, severe, and profound. Six (17.6%) reported their hearing loss as being in the moderate range and twenty eight (82.3%) indicated that they had a profound hearing loss.

All the respondents were hearing aid users (none of them were cochlear implanted).

Eight respondents (23.5%) reported that both verbal and sign language were their primary means of communication in everyday life and 26 (76.5%) reported that only sign language was their primary means of communication.

Ten respondents (29.4%), reported their ages were between 22 to 25 years, nine participants (26.5%) were between 26 to 29 years, six persons (17.6%) were between the age of 30 to 33 years, five (14.7%) were between 34 to 37 years, two employees (5.9%) were between 38 to 41 years, one (2.9%) respondent was at the age of 42-46 years and one (2.9%) was between the age of 47-51 years.

Three categories of occupations of hearing impaired employees were of same percentage, i.e. (14.7%) five respondents were teachers, and five were computer instructors and five were waiters at KFC restaurant. Four respondents (11.8%) at each category of; administration, clerical and data entry post were employed. Three employees (8.8%) were fine art teachers and one (2.9%) participant of each occupation was assistant registrar, cricketer, beautician and tailor. The qualification of the majority of employees was graduation 18(52.9%), seven (20.6%) were intermediates, five (14.7%) were matric, three (8.8%) were primary and only one employee's qualification was M.A.

2.2 Instrument

After reviewing the related literature a structured interview containing twenty two (22) questions with open and closed ended options was developed. The questions were related to physical and social environment of organizations, facilities of residence and medical and provisions of promotion and training opportunities. The reliability of the instrument was 0.67 (Cronbach alpha).

2.3 Procedure

First of all, the individual with deafness working in University of the Punjab were contacted and interviewed. Employees with deafness working in University help to locate other participants of research. Then face to face interviews were conducted through sign language by one of researchers. Thirty four respondents of both major cities of Pakistan

Lahore (18) and Bahawalpur (16) were interviewed for research purpose. They were informed about the purpose of the research. They were requested to spare 20 to 25 minutes for interview. They were assured that confidentiality and anonymity will be observed.

3. RESULTS

The data collected were tabulated and analyzed as under:

Table 1
Relevance of vocational training with current job

Vocational training	Frequency (%)	Current jobs	Frequency (%)
Computer course	15(44.1)	Computer teacher	05(14.7)
Fine Arts	09(32.4)	Fine art teacher	03(8.8)
Beautician course	2(5.9)	Beautician course	1(2.9)
Tailoring	2(5.9)	Tailoring	1(2.9)
None	04(11.7)	Others.....	24(70.5)

Table 1 indicates that most of employees were having skills in computer 15(44.1%) and fine art 09(32.4%) while a few number of them got job according to their professional training (computer 05(14.7%) and fine art teachers 03(8.8 %).

Table 2
Analysis of monthly income

Monthly Income in Rupees	Frequency %
1000 – 5000 thousand	03 (8.8%)
6000 – 10,000 thousand	16(47.0%)
11000 – 15,000 thousand	03 (8.8%)
16000 – 20,000 thousand	09(26.4%)
21,000 – 25,000 thousand	03 (8.8%)

Income of majority of employees were 16 (47.0%) between Rs. 6000 to 10,000 which is considered as low income.

Table 3
Indicating the physical, social environment and other provisions at workplace

Pleasant Experiences	Yes (%)	No (%)
Physical environment of organization is good	20 (58.8%)	14 (41.2%)
Social environment of organization is friendly	31 (91.2%)	3 (8.8%)

Background noise distract you at your workplace	11 (32.4%)	23 (67.6%)
Hearing colleagues cooperates with you	29 (85.3%)	5 (14.7%)
Enjoy trips/picnic with your colleagues	22 (64.7%)	12 (35.3%)
Organizations provide computer technology	18 (52.9%)	16 (47.1%)
Recognize that discrimination and harassment	27 (79.4%)	7 (20.6%)
Head aware of your special needs	20 (58.8%)	14 (41.2%)
Organization provide facility of medical	21 (61.8%)	13 (38.2%)
Atmosphere of organization is generally positive	21 (61.8%)	13 (38.2%)

Table 4**Difficulties faced by employees at workplace**

Difficulties	Yes (%)	No (%)
Workplace very far from your residence	25 (73.5%)	9 (26.5%)
Facility of residence	-	34(100%)
Provision to change working desk to avoid noise	10 (29.4)	24 (70.6%)
Organizations has democratic leadership	16 (47.1%)	18 (52.9%)
Feel hesitation while asking for special accommodations	23 (67.6%)	11 (32.4%)
Organization give reward for good performance	15 (44.1%)	19 (55.9%)
Promotional opportunities	10(29.4%)	24(70.6%)
Staff development and training	11 (32.3%)	23 (67.7%)
Good appraisal systems	12 (35.3%)	22 (64.7%)
Circulate policies are interpreted in sign language	13 (38.2%)	21(61.8%)
Sign language interpretation in meeting	15 (47.1%)	18 (52.9%)

Table 5**Reasons to leave the jobs**

Reasons	Emotional stress	Attitudes	Financial
	8 (23.5%)	4 (11.8%)	15 (44.1%)

A reasonable proportion of responded 15 (44.1%) said that they want to leave their jobs due to financial stress.

Table 6**Availability of hearing assistive technology available at workplace**

Assistive listening devices	Responses
FM system	Not available (34)

Infrared system	Not available (34)
Induction loop	Not available (34)
Personal hearing aid	30 (88.2%)
Telecommunication devices	Not available (34)
Personal cell phone	34(100%)
Amplified phone	Not available (34)
Video Phone	Not available (34)
Visual or tactile alerting devices	Not available (34)

Assistive technology (Listening devices & Telecommunication devices) is not available at workplaces. Most of employees with deafness 30 (88.2%) were using their personal hearing aids and 34(100%) used their cell phones for text messages.

Major findings of the study were as under:

1. A reasonable proportion of respondents (44.1%) were having vocational training in computer.
2. Almost half of employee (47.0%) had monthly salary between 6000 to 10,000 rupees.
3. Majority of employee (58.8%) reported that the physical environment of organization is good.
4. A vast majority of the respondents (91.2%) reported that the social environment of organization is pleasant.
5. Majority of the respondents (67.6%) reported that noise at workplace do not distract them.
6. Majority of the respondents (85.3%) reported that hearing colleagues are cooperative.
7. Majority of the respondents (64.7%) said that they enjoy picnic/trips with their colleagues.
8. Majority of the respondents (52.9%) reported that their organizations provide with computer technology.
9. Majority of the respondents (79.4%) reported that their organizations recognize discrimination and harassment.

10. Majority of the respondents (58.8%) stated that head of institutes are aware of their special needs.
11. Majority of the respondents (61.8%) answered that they organization provide facility of medical.
12. Majority of the respondents (61.8%) answered that the general atmosphere of organization is positive.
13. Majority of the respondents (73.5%) answered that their workplaces are far away from their residence.
14. All of the respondents (100%) answered that their organizations do not provide facility of residence.
15. Majority of the respondents (70.6%) reported that they are not allowed to change working desk to avoid noise.
16. Majority of the respondents (52.9%) said that organizations do not have democratic leadership.
17. Majority of the respondents (67.6%) said that feel hesitation while asking for special accommodations.
18. Majority of the respondents (55.9%) said that organization do not give reward for good performance.
19. Majority of the respondents (70.6%) said that organization have fewer chances of promotion.
20. Majority of the respondents (67.7%) said that organization do not arrange staff development and training programmes for them.
21. Majority of the respondents (64.7%) said that they are not satisfied with appraisal system of organization.
22. Majority of the respondents (61.8%) said that circulated policies are not interpreted in sign language.
23. Majority of the respondents (52.9%) said that provision of sign language interpreter is not arranged in meetings.
24. A reasonable proportion of responded 15 (44.1%) said that they want to leave their jobs due to financial stress.
25. All employs reported that assistive listening devices are not available at their work place and they use their personal hearing aids (88.2%) and mobile phones (100%).

4. DISCUSSION

The present study has many anticipated results. Some of the major findings reflect that employees with deafness are mostly doing semi-skilled jobs and their wages are low. These findings are consistent with the results of a studies reported by Moores (2001) and Khatoon (2006)

that prevocational training had failed to provide the young deaf with the necessary competitive skills and choice of trade is very limited. Employees with deafness highlighted their pleasant experiences as well i.e the physical & social environment of organization is good, hearing colleagues are cooperative and computer technology are available at their work stations.

Most of the subjects of the present study reported communication difficulties, poor appraisal system, few chances of training and promotions and non-availability of assistive technology (Listening devices & Telecommunication devices) at workplaces and they do they feel hesitation while asking for special accommodations. The same findings were also reported by Moores (2001), Khatoon (2006) & Matthews (2014) in their studies on facilities at workplace of deaf which indicates that training, placement opportunities, salaries, and chances for advancement were much more restricted for deaf persons and meetings were a problem for most participants due to background noise and lack of communication support such as a speech-to-text-reporter and sign language interpreters.

5. RECOMMENDATIONS

On the basis of findings following recommendations were made:

1. The heads of all organizations where deaf people are working should remove discriminatory attitude in providing future opportunities, cash awards and titles, promotions and benefits to the employees with deafness.
2. Organization should have free and safe working environment for all of its employees particularly for deaf employees.
3. A fair system of performance appraisal, awards and promotion should be introduced and practiced in the organization.
4. Organization should remove communication barriers for deaf employees by using assistive listening devices, sign language and sign language interpreter during special meeting sessions.
5. Organization should upgrade the quality of overall facilities especially medical and transport facilities for deaf employees.
6. Organization should frequently offer training program for deaf employees within the organization and outside the organization.
7. Organization should blend a flavor of democratic leadership style in the organization and fully involve deaf employees in decision making process.

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Department of Special Education University of Karachi



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Date: April 14, 2016

Subject: Corrigendum for Correction on Missing Name of the 2nd Author in the Article

Published in Pakistan Journal of Special Education, 2015

It is stated that Article, entitled “**The Experience of Persons with Deafness at Workplace**” was published in HEC approved Journal “**Pakistan Journal of Special Education**” Vol, 16, 2015 page No. 135-145. But unfortunately due to the negligence, the name of 2nd author is missing the correct details of author are given in the following and should be consider for future citation.

The editorial board is issuing this corrigendum or an erratum, which shows the name of 2nd author namely **Dr. Hina Fazil**, Assistant Professor, Department of Special Education, University of the Punjab in the published Article

With esteemed regards

Prof. Dr. Nasir Sulman

Editor

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Pakistan Journal of Special Education

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