Teachers and Parents Perspectives about Educational Problems faced by **Students with Autism Spectrum Disorder**

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Abstract

Purposely the intentions behind the study were to identify the problems related to educational accessibility, investigating teachers' technical capacity for delivering adequate instruction to the students with autism and the provision of professional support to those teachers. With the help of the research findings the researchers were able to explore diverse kinds of educational requirements along with social and psychological problems of those children. A total number of 15 school teachers and 15 parents of students were selected from the schools of autism spectrum disorder. Purposive sampling technique was used for data collection. The developed interview guides questions were different in statement structure but the purpose was the same; one for the parents and the other one were for the teachers. Teacher's interview guide was comprised on three themes (assessment tests, educational problems and curriculum adaptation problems). All themes include five questions in each theme. Parent's interview guide was comprised on two themes (Admission and Assessment Tests Understanding, educational issues faced by parents). First theme includes five questions and second theme includes eight questions. Interview guide was based on semi-structured interview guide and with open-ended questions. After getting the responses the researchers interpreted each response in within technical sound boundaries. The results of the study shows that parents of ASD children have not enough knowledge about this disorder and they also do not attend their child IEP meeting. It was concluded that the children with autism were encountering with a number of social and psychological problems that was becoming hindrance for their smooth and effective education and lack in collaboration was also found among teachers, other professionals and the parents. It is recommended that government should hire some professional and make laws for access of quality education for ASD children. **Keywords:** Quality Education problems, Autism Spectrum Disorder, Parents & Teachers

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Introduction

School going children face many problems few of those are: access, financial resources. teacher's behavior, authentic assessment and conduct of peer group. When our focus is on children with disabilities then the scenario of problems become different and varies from disability to disability. The topic under research covers the identification of the educational problems of children with autism. This is very obvious while a professional involves in-field experience. According to the Association (2013) autistic disorder is known as Pervasive Developmental Disorder, which restricts three major areas of development. Those are: delayed abnormal areas communication patterns, social interaction and repetitive behaviors and interests. According to Autism Society of America (1994) due to the problem of autism the child usually encounter's with many issues in critical areas of developmental milestones such as; vocal & other communication domains, socialization and related personal interactional problems, imaginary/creative play and also low to higher levels of concerns in sensory processing.

While Suhail and Zafar (2008) reflected the situation of Pakistan and stated that there is very a limited number of research based publications accessible for the academic professional. Consequently, the academic professionals do not have indepth understanding of the educational problems of diverse learners and the resources to cope with the problematic situations. One of the main reasons is no

uniformity in our education system. Another root cause is much variation in the organizational configuration of the institutes and different kinds of curriculums for supporting understudies with uncommon requirements.

Fombonne (2005) revealed that among such children who on a spectrum of autism naturally demonstrate many variations among the same disability. This is similar to the individual differences among all human beings. As per the assessment findings and diversity within one single disability there also requires a structured intervention program for every individual. Similarly Jordan, Lewis, and Norwich (2004) found that children with autism have irregular patterns of cognitive abilities and weak areas. In the result of such irregularities their education suffers a lot. Young children and grown person with autism share similar characteristics with other disabilities. Those features can be: rote memory, problems with the theory of mind and problem-solving challenge. Baron-Cohen, Jolliffe, Mortimore, Robertson (1997) established that students with autism do not understand any other person's points of view, beliefs and emotions. These students also encounter with difficulty in predicting and making judgments about others' thoughts and feelings. Because of such characteristic, they can't differentiate between fantasy and facts. According to the Alpert & Damp; Kaiser (1992) once a student is able to imitate a model of the target language response then

only a mand, cueing him that he should produce some language, or a time delay, a non verbal cue, can be used. A mand procedure can help the child use the target language response in a conversational manner and the

subtler, nonverbal time delay procedure can increase spontaneous language production. At some point all prompts need to be faded so that students produce appropriate spontaneous language.

Scheuermann and Webber (2002) reported that students with autism have a problem in retrieving information. Students with autism spectrum disorder mostly use one problem-solving strategy and without a guarantee of success. According to Arter, Sworen-Parise, Faseiana, and Panihamus (2012) those children may have unusual responses to people and objects and they do not use suitable words or gestures. The children who are on autism spectrum face difficulty to play in a typical manner by following rules of games. These children are also going through some sensory issues and without a proper plan of intervention they cannot work in a noisy environment. They don't like to touch by others and don't give eye contact to the other persons. Among these, some other inabilities make it difficult to accomplish academic targets.

Similarly, in few researches conducted in Pakistan Saira, Maryam and Azeem (2012) & faiza (2011) reported that teachers repeatedly shared that it is very challenging to meet the sensory and educational needs of the students with

autism. A teacher should need to be aware of the student's learning needs, learning patterns and behavioral characteristics. These learning characters or styles can guide the instructors for further educational planning which can facilitate transition planning of such learners.

Saira (2012) reported few identical strategies regarding learning patterns of ASD that visual scheduling and picture exchange communication method is very helpful for coping autistic problems during their training. Arter, Sworen-Parise, Faseiana, and Panihamus (2012) conducted research with similar focus and concluded that working in pairs be beneficial in teaching because these children not only have problems with communication but also suffer from the problem of socialization. By facilitating peer interaction, the teacher can help these students for interacting with peers and making friends.

Luyster et al. (2005) conducted research on multiple groups of children. In which they selected 351 children with autism spectrum disorders, 21 children with developmental delays, and 31 children with typical development. For the purpose of data collection this they conducted interviews of caregivers (i.e., the Autism Diagnostic Interview-Revised) and described children's early acquisition and loss of social-communication milestones. There found a significant minority of children with autism who were without word loss exhibited a comparatively similar pattern of loss of social-communication skills which

was not observed in the other two groups of children.

Saira (2012) also pointed out that involved in the strategic process of friendship fostering definitely helps them to become more included in the mainstream environment. In the Pakistani scenario, parents are in trouble with choosing the appropriate school for their children with autism. Like many other disabilities in the past the students with autism spectrum disorders were kept separate from the regular peers and get them admitted in the classes of students with mental retardation. But if we take a view of the past few decades we observe that the trend of mainstreaming children with autism has become increased.

There are many private schools in Lahore that are providing academic, social and communication services to children with autism. The services providing at those schools are lacking in quality education and other social setup services. The assessment procedures are not sufficient and appropriate in these schools. So if the assessment is not according to the individual disability needs then it is very obvious that the educational services and educational plans will also poor and unauthentic. The class teacher can't read the child properly and can't assess his /her educational needs and learning styles (Boujarwah et al., 2012).

Imran and Azeem (2014) conducted a research study and investigated the level of awareness among professionals and the knowledge based facts and figures about

autism spectrum disorder in Pakistan. They found that there were gaps in health-care of such children. Their medical needs related with the services of multiple health-care professionals were not addressing properly. It was also seen that the level of understanding about disorder and intervention can significantly impact on the lives of children with autistic disorder, care givers and their families as well. Moreover, this is very unfortunate that the disorder of autism along with many other progressive disorders yet not acknowledged due and adequate consideration from policy makers and stake holders in our country. Furthermore it was also highlighted that there were various misconceptions and myths regarding prominent features of autism among professionals. These kinds of misconceptions and myths may lead to wrong interventions and kids are more at risk than anything else. Consequently this is one of the major barriers in planning and implementing any program improvement of academic, healthcare and mental well-being of children with autistic disorders in Pakistan. It is suggested that there must be taken various safeguarding steps as preventive measures before going to finalize any kind of intervention. The key to those essential measures is to discover the gaps in knowledge that hinders the progress of those kids. Once those gaps are identified then there must take remedial measures. The gaps can be bridged only when the professionals decide and strive to reform their future efforts in the light of the past. This shall improve intervention programs in multiple domains. such as. medical.

Community based rehabilitation in form of community awareness campaigns, allied health sciences, formation of advocacy instructional and curricular groups, adaptations, education, medical quality educational schools, services at family/caregiver support programs. Finally all these above mentioned precautionary steps will contribute for increase the process of early identification and intervention of autistic disorder. That will lead towards quality education and training for a quality living.

In another study conducted by Ullah, Agdas, Khan, Nabi, and Aziz (2015) in Pakistan there are very surprising findings on prevalence of autism. Because of neglected, careless and ignorant attitudes of the professionals the researches are executed at very poor level. According to the analysis of those research reports it ranges from 2.4% to 5.3%. Regardless of these obvious challenging situations there is a lack of authentic researches and clinical setup. Whereas each fiscal year there just allocated very less budget for disability, mental wellbeing and health. Assessment. management and counselling centers portray a very different image of the facts regarding autism. These centers reflected portentous statistics which are not alike state level findings. The process of diagnosis, management and intervention services need a very competent team of professionals. Those professionals must belong to diverse domains like, medical, academic, psychiatry, paramedics, speech and language therapists, occupational therapists along with parents.

Their collaboration is required for every area of improvement. For the intervention of speech a speech therapist work with occupational therapist, social skill intervention, class teacher and medical services. The collaborative approach is key to a successful intervention program. For the quality education services the emphasis should be on a highly structured behavior intervention plan. That plan should cover the coping strategies of aggression, meltdowns and anxiety for the training in daily living skills i.e. toilet training, personal hygiene and independent feeding. The professionals should extend their group and individual support for the parents of such children for the execution of a successful intervention plan and improvement of academic quality. The role of family physicians pediatricians is very crucial, as they are usually our major point of contact. For the awareness and contribution of parents and the community the professionals must keep them updated with the help of awareness seminars, involvement in final decision making procedures and form community based advocacy groups. All kind of discussion and material should be simple and in native language. This shall definitely safeguard us from the stigmatization of autism.

So, on the basis of above mentioned research studies the focus of the current research was to explore the educational problems of the children with autism so the professionals can make suitable arrangements for the provision of all required facilities better than before. Major

objectives of the study were investigate about already provided teaching training and support according to ASD's educational needs, Identify the educational needs of children with autism and Identify the social and psychological educational problems of the children with Autism

Research Design

Qualitative research design was adopt for this study while the nature of this study was phenomenological. Cross-sectional survey method was used for this study.

Sampling of the Study

Population of the study was consisted of all teachers who teach autistic children in special education centers and all parents who have one autistic child. The researchers selected 15 school teachers and 15 parents of students with autistic disorder from different schools of autism in Lahore.

Procedure of the Study

Purposive sampling technique was used for data collection. Participants were selected who have willing to participate in this study. All teachers have an experience and also member of administration department in a special education centers. Teachers have a minimum 1 year experience to deal with autistic children. Selected parents

qualification was matric and had complete understanding about this study. Parents have must one autistic child in their family. Autistic child must enroll in school. The developed interview guides questions were different in statement structure but the purpose was the same; one for the parents and the other one were for the teachers. The purpose of the development of themes was to get detailed responses. Validity of the interview guide was check thorough autism spectrum disorder professionals and experts. Teacher's interview guide was comprised on three themes (assessment tests, educational problems and curriculum adaptation problems). All themes include five questions in each theme. Parent's interview guide was comprised on two themes (Admission and Assessment Tests Understanding, educational issues faced by parents). First theme includes five questions and second theme includes eight questions. Results of this study were shows on the basses of themes. Each theme interpretation represents the participants all questions answers.

Interview guide was based on semistructured interview guide and with openended questions. According to the interview guide themes the basic indicators of this research were assessment, admission access, curriculum, socialization patterns, communication patterns and repetitive behaviors and interests of these children.

 Table 1

 Indicators of interview guide to access the quality of education

| Sr# | Indicators to Access Quality of Education |
|-----|---|
| 1 | Assessment |
| 2 | Admission Access |
| 3 | Curriculum |
| 4 | Socialization Patterns |
| 5 | Communication Patterns |
| 6 | Repetitive Behaviors and Interests |

Participants were bilingual so that the respondents easily understand the point and reply properly as per the demands of authentic information.

Teacher's research questions of the study were:

Assessment tests

- 1- What are the different assessment tests you used for children with autism?
- 2- How many members add to the admission committee to solve the admission related issues of the children with autism?
- 3- What are the basic considerations at the time of admission of children when you get history from parents?
- 4- Is different IEP developed for the children with autism?
- 5- Do you prefer document child's history from parents at the time of admission and assessment?

Educational Problems

- 6- Through better quality of education which kind of improvement you see in an autistic child?
- 7- Do you think parent's financial issues impact on education of the children with autism?
- 8- According to you what challenges you face for access the quality of education for students with ASD?
- 9- According to you what are the main factor of better quality of education for autistic children?
- 10- Are parents given any training to solve educational problems at home?

Curriculum Adaption Problems

- 11-Do you think taught curriculum fulfills the needs of the children with autism?
- 12- Do you think taught curriculum is according to the needs of modern trends?
- 13- Do you use any special educational program to teach the children with autism?

- 14- Does the taught curriculum equip the children with autism for their practical life?
- 15- Does school prepare program based on communication needs?

Parent's research questions of the study were:

Admission and Assessment Tests Understanding

- 1- You have complete information of IEP/individual assessment of your kids or not?
- 2- What is your information about your kid's IEP meeting in a school when you attend the meeting?
- 3- Is there any parent teacher consultation committee formed at the time of admission?
- 4- Do teachers of the children with autism provide any referral history?
- 5- Are teachers or psychologists any psychological problem of the child with autism with you?

Educational Issues faced by Parents

- 6- According to you parent's financial issues impact on education of the children with autism?
- 7- Do the children with autism discuss classroom problems/ issues with teacher?
- 8- What you think Autistic children level affects the children education process?
- 9- According to you which educational issues whose solution you sought out through parents teachers meeting?

- 10-Tell me briefly about what basic issues or problems you face during admission of your kid in a school?
- 11-What you think transportation is a big issue for your child education process?
- 12-Do you think social support and community negative behavior you face during your child educational career?
- 13-What you think autistic children irritating and repetitive behavior is a big issue in education?

After data collection, the collected data were analyzed through Microsoft excel. Through Microsoft excel firstly makes themes and code all interpret data after this, all respondents answers analyzed.

Results of the Study:

After running Microsoft excel the researchers were able to reveal many surprising facts reported by the teachers and the parents of the children who were going through with the problem of autistic disorder. Most of the teacher's participants believed that they use childhood autism rating scale (CARS), Sensory Therapy, PECS and ABLLS. Teachers use portage guide, childhood autism rating scale (CARS) and ABLLS. Many of those students were enrolled and studying in schools for many years. The findings also reflected the level of commitment and collaboration among teachers and the Parents' parents. participants reported that there is no parent's teacher association in their schools for children with autism. Such issues are

addressed which are how to deal with kids, which things help more, diet plan, the arrangement of supplementations and parent counseling with the help of parent teacher

association. Through below reported findings there will develop an insight towards the current quality of academic and other required services to those students.

Table 2 Teachers Responses

| Research Themes | Teacher's Responses |
|-----------------|---------------------|
|-----------------|---------------------|

Assessment Tests

Seven participants out of fifteen reported that they used same assessment tool for children with autism. They use childhood autism rating scale (CARS), Sensory Therapy, PECS and ABLLS. Teachers use portage guide, childhood autism rating scale (CARS) and ABLLS. Nine participants out of fifteen reported that they provide parent teacher consultation committee formed at the time of admission. Five participants out of fifteen teachers suggested that they do not use any test for the assessment of children with autism. They use those tests through which they can assess the mental ability children with autism. Three participants out of fifteen reported that these test are taken by psychologists. Those tests are related to the child's educational and psychological problems and how to resolve these types of issues. Five responded out of fifteen said that they prepared any record based on information provided by parents regarding their child's history. They get child behavior report, attitude, disability severity level, social behavior activity pickup routine from parents. Teachers responded that parents of the children with autism provide any referral history. Parents do not provide only medical history record. **Teachers** responded that the children with autism get admission in their school easily.

Educational Problems

Eight participants out of fifteen expressed that Psychologist, Co-coordinators, Teachers. **Parents** and Special educationists that were the members of the committee. Four participants out of fifteen suggested that Psychologists, Class teachers, Speech therapist, Clinical psychologists, Parents, School staff, Educational psychologists and Principal that were the members of the committee. Three participants out of fifteen reported that these were two members. School teachers were the members of that committee. Ten participants out of fifteen replied that presenting complaints, birth history, medical history, family history, child's personal history, educational psycho-social history, assessment. milestones/developmental history child's family set up these things are considered while taking a history from the parents of children with autism. Three participants out of fifteen teachers reported that about behavior, socialization, speech and language information these things are considered while taking a history from the parents. Two participants out of fifteen reported that the parents of children with autism are giving true and correct history. Nine participants out of fifteen reported that quality education improve the autistic children confidence and socialization. Better quality of education provides all facilities, material and teaching strategies that ASD child need. Teachers modify the curriculum and activities of ASD children according to the childe severity level. ASD child socialization

, communication, academic skills improved through better quality education. Four participants out of fifteen said that only the child learn about their

Curriculum Adaptation Problems

Eight participants out of fifteen discussed that recently taught curriculum or completely fulfill the desires of ASD children. Curriculum cannot be adopted according to the level and need of the student. Curriculum only taught in a schools design by government or special centers heads and as it is teachers follow in a class for both normal and disable persons. In some private special centers curriculum should adopt and adapt but under a supervision. Seven participants out of fifteen said that current curriculum taught in a ASD centers cannot follow the modern trends of society. ASD children never build confidence and thinking sense through this curriculum. Schools are not ready for face to face communication. Curriculum in schools should be flexible and easy for disable persons. Physiotherapies also provided for side by side the education.

Table 3Collective responses of the participants

| Themes | of | the | Interview | |
|--------|----|-----|-----------|--|
| guide | | | | |

Parents responses:

Admission and Assessment Tests Understanding

Eight participants out of fifteen discussed that such information is given to their child that is about a child's related education, psychological problems; type of problems and its solution for the IEP and self-assessment of the children with autism not clear and never discussed with them. They also told that communication skills, and social and self-help skills, Self-assessment of the children with autism not build. Schools or class teachers never provide any information to their child for the IEP and Selfassessment of the children with autism. Five participants out of fifteen reported that such information is given to their child that is about a child's educational, behavioral learning problems their solutions assessment. curriculum of kids for the IEP and self-assessment of the children with autism. Child's IEP and Self-assessment and it is suitable for the program. Parents reported that such information is given to their child that is about simple tasks like colors, words and body parts recognition for the IEP and Self-assessment of the children with autism. Six participants out of fifteen reported that in their child's IEP meeting such information is given that is related to areas of problems, objectives of IEP, action plan, material and placement. Parents s reported that in their child's IEP meeting such information is given that is related to how to work with child, teaching methodology and how to control the objectives of the educational plan. Five participants out of fifteen purposed that in their child's IEP meeting such information is given that is related to their child's current conditions, achievements and about their child's future planning. They also said that information is given that is related to how to solve the academic and behavioral issues of the children with autism. Teachers never discuss the psychological problems of the child with us only the child severity level tell. Four participants out of fifteen stated that in their child's IEP meeting such information is given that they use at home. Parents reported that in their child's IEP meeting such information is given that is related to the weekly report, how to solve their behavioral issues and discussed future plans for the children with autism.

Educational Issues faced by Parents

Eight participants out of fifteen reported that there is no parent's teacher association in their schools for children with autism. Such issues are addressed which are how to deal with kids, which things help more, diet plan, the arrangement of supplementations and parent counseling with the help of parent teacher association. Five participants out of fifteen reported that such issues are addressed that are according to children's educational, behavioral needs and issues with the help of parent teacher association. Two participants out of fifteen stated that such issues are addressed which are how to work at home with the child with autism. The issues that are addressed with the help of parent teacher association provide benefits for the child with autism. Nine participants out of fifteen reported that they faced such problems at the time of admission that is related the children with autism diagnose, assessment, educational services and proper schooling. Parents reported that they do not face any problem at the time of admission. Five participants shared that they faced late admission issues because general education schools refuse their kids and they did not find good special schools in Lahore. One participant reported that she faced many issues at the time of admission but if the teachers work with their child and provide teacher aids at school with their child the admission issues will resolve because after awareness about disability there are many schools that are ready to admit disabled students in their schools.

Conclusion

On the basis of data analysis and interpretations from the inventories the following conclusions were proposed: The results showed that the teachers were experienced in teaching children with autism. The teachers and parents of children with autism were showing their some collective capacity to fulfill the educational

needs of those children to some extent. The children with autism had lots of social and psychological problems that affect their education. The educational accessibility was one of the critical issues. Furthermore; the parents were not provided with any solution at the time of getting admission in general education schools. Comparison among respondents belonged to different schools showed that the respondents of Lahore

Cambridge School (Pervarish) and Autism institute of Pakistan were more aware of the educational problems of children with autism.

Discussion

The topic of the research was "Educational problems of children with Autism". The purpose of the study was to see the educational problems of children having Autism. The study examined the behavioral, educational, psychological, medical and economic problems of children with Autism. The results of the study depends on two persons points of views (parents and teachers). Both two persons closely known which educational issues ASD children faced during their schooling. According to parents and teachers point of view ASD children have a problem of eye contact, social interaction, making friends and interacting easily with friends. Different researchers also discuss the same point like (Azad, 2015) reported in his study that teachers and parents concerns about ASD children. Different interventions improve the communication of the ASD children. Autism rating scale (CARS), Sensory Therapy, PECS and ABLLS. Teachers use portage guide, childhood autism rating scale (CARS) and ABLLS helps teachers to assess the child easily in the class. All teachers does not use same assessment test they choose according to their ease level. No any diagnosing rating scale proper assessment scale is used in special centers. IEP is not made properly and even parents are not clearly understood about child's IEP. Before and during making IEP school

administration committee never include parents and class teachers. They prepared any record based on information provided by parents regarding their child's history. They get child behavior report, attitude, disability severity level, social behavior and activity pickup routine from parents. Teachers responded that parents of the children with autism provide any referral history. Parents do not provide only medical history record. Teachers responded that the children with autism get admission in their school easily. Psychologist. coordinators, Teachers, Parents and Special educationists all include the members of the committee. Presenting complaints, birth history, medical history, family history, child's personal history, educational history, psycho-social assessment. milestones/developmental history child's family set up these things are considered while taking a history from the parents of children with autism. ASD children behavior, socialization, and speech and language information these things are considered while taking a history from the parents. Current curriculum taught in a ASD centers cannot follow the modern trends of ASD children never society. confidence and thinking sense through this curriculum. Schools are not ready for face to face communication. Parents thinks that communication skills, and social and selfhelp skills develop for the IEP and Selfassessment of the children with autism. Teachers cannot provide any information to their child for the IEP and Self-assessment of the children with autism, information is given to their child that is about a child's

educational, behavioral assessment, learning problems their solutions and curriculum of kids for the IEP and self-assessment of the children with autism. Parents have not knowledge about their child enough education and tests. They normally face financial and transportation issues. All the parents think major educational problem of their child is money and disability. His or her child never moves in a society. Results show that we really need a initiatives and innovations in a social and autism centers. Private institutes charges too much fee that no middle class parents afford government should take steps and decrease the charges of the private schools.

Implications for practice

On the basis of the major findings and conclusions there must be suggested a few implications for practice at schools:

Private school administrators should provide scholarships/financial assistance for improving the admission rate of children with autism. School administrators should providethe parentswith training facilities, who are lacking in managing autism and co-morbid other conditions.School administrators should establish PTA (Parent Teacher Association) to solve the educational problems of the children with autism. Teachers should investigate and discuss issues with parents that are related to their child's home and classroom behaviors as well. Teachers should try to use verbal cues in the classroom according to the situation for those children who have communication problems and have limited vocabulary. Teachers and parents should discuss the, educational, psychological and other child's related complaints with each other. Parents and teachers should collaborate to solve the educational and psychological problems in school and at home as well. Parents should provide their child's medical history to the school

References

- Arter, P. S., Sworen-Parise, C., Faseiana, M., & Panihamus, M. A. (2012). Social skills training for young adults with autism spectrum disorder: Overview and implications for practice. *National Teacher Education Journal*, 65-57.
- Association, A. P. (2013). Diagnostic and statistical manual of mental disorders (DSM-5®): American Psychiatric Pub.
- Azeem, f. j. a. a. (2011). A study of educational problems of children with autism. *An unpublished masters* thesis.
- Baron-Cohen, S., Jolliffe, T., Mortimore, C., & Robertson, M. (1997). Another advanced test of theory of mind: Evidence from very high functioning adults with autism or Asperger syndrome. *Journal of Child Psychology and Psychiatry*, 38(7), 813-822.
- Boujarwah, F. A., Rozga, A., Abowd, G. D., Arriaga, R. I., Oberleitner, R., & Pharkute, S. (2012). Towards inhome collection ofbehavior specimens: Within thecultural context of autism in Pakistan. Paper presented the 2012 6th

- International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth) and Workshops.
- Faiza, a. a. A. (2011). A study of educational problems of children with autism. *An*
- unpublished masters thesis.
- Farooq, M. S. (2013). An Inclusive Schooling Model for the Prevention of Dropout in Primary Schools in Pakistan. *Bulletin of Education and Research*, *35*(1), 47-74.
- Fazal, R. (2012). Readiness for inclusion in Pakistani schools: Perceptions of school administrators. *International Journal of Social Science and Education*, 2(4), 2223-2227.
- Florian, L. (2012). Preparing teachers to work in inclusive classrooms: Key lessons for the professional development of teacher educators from Scotland's inclusive practice project. *Journal of Teacher Education*, 63(4), 275-285.
- Fombonne, E. (2005). The changing epidemiology of autism. *Journal of Applied Research in Intellectual Disabilities*, 18(4), 281-294.
- Imran, N., & Azeem, M. W. (2014). Autism spectrum disorders: perspective from Pakistan. *Comprehensive Guide to Autism*, 2483-2496.
- Jordan, R., Lewis, A., & Norwich, B. (2004). Autistic spectrum disorders. SPECIAL TEA, 110.
- Luyster, R., Richler, J., Risi, S., Hsu, W.-L., Dawson, G., Bernier, R., . . .

- McMahon, W. M. (2005). Early regression in social communication in autism spectrum disorders: a CPEA Study. *Developmental neuropsychology*, 27(3), 311-336.
- Richler, J., Luyster, R., Risi, S., Hsu, W.-L., Dawson, G., Bernier, R., . . . McMahon, W. M. (2006). Is there a 'regressive phenotype' of autism spectrum disorder associated with the measles-mumps-rubella vaccine? A CPEA study. *Journal of autism and developmental disorders*, 36(3), 299-316.
- Saira, M. a. A. A. (2012). A study of patterns of socialization of children with Autism. *Unpublished masters thsis*.
- Scheuermann, B., & Webber, J. (2002).

 **Autism: Teaching does make a difference: Wadsworth Publishing Company.
- Soomro, A. M., & Saeed, A. (2016). Identification of the factors causing drop out among elementary school students in Larkana, Sindh. *International Journal of Research in Social Sciences*, 6(3), 78-90.
- Suhail, K., & Zafar, F. (2008). Prevalence of autism in special education schools of Lahore. *Pakistan Journal of Psychological Research*, 23(2).
- Ullah, S., Aqdas, I., Khan, N., Nabi, G., & Aziz, T. (2015).Awareness Regarding Autism Schools' in Teachers at District Lower Dir, Khyber Pakhtunkhwa. Pakistan. Universal Journal of Medical *Science*, 3(3), 55-59.

Young, E. C., Diehl, J. J., Morris, D., Hyman, S. L., & Bennetto, L. (2005). The use of two language tests to identify pragmatic language problems in children with autism spectrum disorders. Language, speech, and hearing services in schools.