



# EFFECTIVENESS OF COMMUNITY SCHOOL NETWORKING FOR CHILDREN WITH AUTISM: PERSPECTIVES OF TEACHERS AND SCHOOL ADMINISTRATORS

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## ABSTRACT

**Objective:** In order to provide equal educational opportunities, community school networking is an emerging trend to facilitate inclusion of children with mild-moderate Autism. This quantitative research aims to investigate the effectiveness of community networking for children with Autism from Pakistani lower socio-economic stratum of society.

**Study Design:** Qualitative Research Design

**Study Settings and Participants:** Six mild-moderate autistic children were enrolled in three mainstreams schools and a liaison between these schools, and a rehabilitation center located in the same area was created to facilitate inclusion. The researchers interviewed six teachers from mainstream schools, three school administrators and one administrator of rehabilitation regarding the effectiveness of community school networking for children with Autism after eight months of this collaboration.

**Data Collection Tool:** Data were obtained through semi-structured interviews

**Results:** All participating administrators and teachers underscored the changes in social

and behavioral patterns of autistic children which included an imitation of positive behaviors from peers, acceptance, and awareness as strengths of community school networking model. However, major challenges faced were unacceptability from parents of normal children, learning differences, curriculum modifications, time constraints and dependency on the resource teacher. The administrators and teachers recommended that creating awareness programs for parents of normal children, curriculum modifications and in-house psychologists can further facilitate inclusion of children with disabilities.

**Conclusion:** It was concluded that community school networking model can assist inclusive education and encourage engagement for all children, including those who are autistic.

**Keywords:** *Special education, mainstreaming, disabled children, mentally disabled persons, autism spectrum disorder, rehabilitation of speech and language disorders, social skills.*

## Introduction

Community School Networking has become a beacon of good practice for providing services to special needs students in inclusive settings<sup>1,2</sup>. Inclusive education allows children with disabilities to follow the same educational practices as their peers in the community<sup>3,4</sup>.

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The community school networking approach is characterized by collaboration between two or more schools from different settings which work together to serve special needs children<sup>5,6,7</sup>. Community School Collaboration is based on three major needs (1) managing diversity (2) limited resources and (3) particular needs that necessitate collaborating across schools<sup>8</sup>. It is an approach to collaborate in a comprehensively and efficiently manner in order to support the inclusion of students with special needs<sup>9</sup>.

Research demonstrates that collaboration between rehabilitation centers and mainstream schools is more challenging than alliance among regular schools<sup>10</sup>. Several studies highlight the elements that either enhance or hinder collaboration between special and regular schools. Among elements that boost collaboration are effective communication, cooperative planning, shared understandings, shared ideals and strong leadership aspects<sup>12,13</sup>. Additionally, four main categories are indicated for classifying effectiveness of community school networking: (1) fostering working connections; (2) promoting inter-school procedures; (3) provision of resources; and (4) developing management and governance structures<sup>14,15</sup>. On the other hand, literature also highlights some major obstacles to community school networking which include systematic communication and matching schedules, lack of funding, availability of resources, disparities in viewpoints, lack of trust and poor communication<sup>16,17</sup>. However, if properly implemented, the advantages of community school networking between special education and regular schools outweigh the disadvantages and surveys of inclusive educational settings indicate positive results for special and as well as normal ability learners<sup>18,19,20</sup>.

Despite the importance of community school networking for inclusion of children with disabilities, collaborative practices are rarely applied for inclusive education in Pakistan. Moreover, there is a shortage of literature on collaboration and networking for inclusion in the Pakistani context, particularly for communities of low socio-economic standing<sup>21,22</sup>. Therefore, this study aimed to examine the effectiveness of community-networking schools for inclusion of children with mild to moderate autism from the lower socio-economic stratum of Pakistani society. Following the purpose of the study the research question was “How beneficial is community school networking for children with mild-moderate autism spectrum disorder?”

Community School Networking has been regarded as crucial for meeting the complex needs of students with autistic spectrum disorder and other disabilities in inclusive settings<sup>5, 23, 24</sup>. Autism is a chronic neurodevelopmental disease that manifests as in reciprocal socialization and communication difficulties accompanied by limited, rigid, and repetitive behaviors and interests<sup>25,27</sup>. The prevalence of autism has been rising gradually, it is currently estimated that more than 350000 children are diagnosed with Autism in Pakistan<sup>28,29</sup>. Primary care, community-based specialist clinics, and schools are among the service providers required to provide care for the co-occurring problems associated with Autism<sup>5,30,31,32,33</sup>. The continuous raise in occurrence of ASD has created a need for collaboration to ensure early intervention and timely diagnosis<sup>25,34</sup>. From the standpoint of inclusive education, it is been reported that school professionals and school psychologists are frequently collaborating with clinics, rehabilitation centers and other outside agencies to cater the needs of ASD in inclusive educational settings reference 35 missing in ascending order<sup>8,36</sup>. Several studies have addressed the importance of networking and collaboration for inclusion of these children in mainstream classrooms<sup>14,25,34,35</sup>.

Uttayotha and Scheef<sup>4</sup> in a study, interviewed administrators and teachers of inclusive schools regarding how schools can partner with local agencies to provide services for children with disabilities in inclusive educational settings. The analysis of data gathered revealed three main themes including collaboration, coaching, mentoring and service delivery. The study suggests networks between schools does not only increase collaboration between school and outside agencies but also increase inter-school collaboration within inclusive schools. Networks also

facilitate teachers training on inclusive education while teachers generally do not receive it during teacher education programs. Partnerships are allowed in school service delivery to meet the special needs of students with disabilities in inclusive settings.

Studies have also examined the barriers and challenges of networking between schools and rehabilitation centers or clinical settings. Garder et al.<sup>32</sup> in their research identified that both schools and clinical service providers faced similar challenges for inclusion of children with special needs. Limited time, lack of support, communication difficulties and limited knowledge of school teachers are the major constraints addressed in the study.

In another research, Olsson and Roll-Pettersson<sup>33</sup> addressed the perspectives of teachers, parents and school administrators regarding the collaboration between Swedish preschools and habilitation center for intervention of children with ASD in inclusive settings. It was a case study involving two 5-year-old children diagnosed with ASD enrolled in preschool mainstream settings for 12 months research period. The results revealed that all of the participants perceive that collaboration between school and rehabilitation center as positive for the children diagnosed with autism spectrum disorder. Regarding the challenges faced it was reported that although habilitation centers provided training and guidance to the preschool teachers but the preschool teachers lacked the skills and expertise to adopt the advice provided in preschool settings. It was also reported by the parents that the advices provided for inclusion of children in preschool settings are not followed by the teachers. The research highlighted the crucial responsibility of the principals of preschools for implementation of inclusion.

Bateman et al.<sup>11</sup> suggest that a multidisciplinary team is required to meet the needs of children with Autism in inclusive settings. Collaboration is the key component for increasing the quality of education for all children especially those with autism spectrum disorder. However, networking and collaboration among schools and rehabilitation centers is one of the most challenging and complex component of early childhood education and special education. Effectiveness collaboration techniques are required to guarantee successful outcomes, for children with Autism in inclusive settings. Bateman et al.<sup>11</sup> addressed the process of collaboration among stakeholders for an early intervention program created to serve preschoolers with Autism in mainstream settings. The study highlighted the importance of through success stories of children and experiences of parents of young children affected by ASD. All reports presented in the research indicated positive outcomes of collaboration. The study also provided guidelines for effective networking and collaboration.

Azad et al.<sup>8</sup> described community collaboration as a facilitator to meet the complex needs of Autistic children in mainstream classrooms. The researcher explained that networking and collaboration are two different forms of inter professional partnerships. In school networking model members of network work together on periodic basis. On the other hand in collaborative model, members regularly met to achieve common objectives. The experiences of collaborations of medical professionals with mainstream schools including children with ASD were explored in his study. The data was obtained from members of collaborative community who were frequency in providing services to children with Autism in mainstream schools. The researcher employed both qualitative and quantitative data collection tools in the study. The results reveal that inter professional partnership improves service delivery for meeting special need of Autistic children and reduce expenses associated with these services.

## Methodology

### Study Design

The researchers adopted a qualitative research design to answer the proposed research questions. Qualitative research explains "how" and "why" a certain social phenomenon functions in a certain

context. It describes problems or events from the participants' perspectives. This type of research is helpful for generating new ideas<sup>35</sup>. The study employed qualitative research to facilitate an in-depth analysis of community networking models based on the experiences of teachers and school administrators<sup>36,37</sup>. Within the qualitative research, the researchers employed action research methodology. Action research is widely adopted by teachers and practitioners to determine challenges in inclusive practices and to help facilitate inclusion for children with disabilities<sup>38</sup>.

The researchers combined a phenomenological lens with action research. They explored the experiences and practices of teachers and administrators regarding community school networking for inclusive education. Action researchers frequently use phenomenology to focus on the natural or social world as people experience, conceive, and describe it<sup>39,40,41</sup>. Merriam & Tisdell<sup>37</sup> suggest that phenomenological research design seeks underlying structure of the phenomena.

### **Study Settings and Participants**

Participants of this research included teachers and school administrators of six children diagnosed with mild-moderate ASD from a lower socio-economic area in Karachi. The interviews from mainstream education teachers and administrators were taken to evaluate the effectiveness of community networking model. Six teachers from mainstream schools, three schools' administrators and one administrator of rehabilitation were interviewed regarding the effectiveness of community school networking for children with Autism. The children with autism spectrum disorder were enrolled for four months in rehabilitation center and four months in mainstream school settings.

### **Duration of Study**

The duration of the study was 8 months which included 4 months period students with ASD spent in rehabilitation center to prepare them for inclusive settings and 4 months period in inclusive school settings.

### **Sampling Technique and Sampling Method**

It was a purposive selection since it involved the purposive identification and selection of participants<sup>42</sup>. The selection was based on the age and diagnostic report of their children. Only school administrators and teachers of children who were diagnosed with mild to moderate ASD with no other associated disability were included.

The access to rehabilitation center was obtained since the researcher was associated with rehabilitation center and access to three mainstream schools was gained through the links provided by rehabilitation center.

### **Inclusion Criteria**

Teachers and inclusive school administrators of children with mild-moderate autism aged between 4-6 years who spent 4 months at rehabilitation center and 4 months in inclusive settings.

### **Exclusion Criteria**

The school administrators and teachers of children who had other associated disorder with mild-moderate Autism were excluded from the study.

### **Data analysis**

The methods prescribed by Corbin and Strauss<sup>36</sup> were used for analysis of data. Raw data was broken into discrete parts, and codes were assigned according to the data. Codes that are found to be conceptually similar were grouped under more abstract concepts to form themes<sup>38</sup>.

## Findings

The findings reported by the teachers and administrators were divided into three main themes including benefits of community school networking, the challenges faced by the teachers and administrators in the process of inclusion and suggestions for improvement. The benefits of community schools networking include positive perspectives of school administrators and teachers, opportunities for socialization, positive changes in behaviors, teachers' professional development, peer learning and awareness about autism. While the challenges involved in community networking model included complaints from parents of normal children, negative behavioral learning for normal students, and difficulty in time management and difficulties in managing curriculum content. The suggestions given by teachers and administrator include counseling programs for parents and in house school that can help the teachers.

### Benefits of Community School Networking

#### Positive perspectives towards Inclusion

The findings of the study indicate positive perspectives of school administrators and teachers regarding community school networking for children with mild to moderate Autism. All of the participants perceived community school networking as a facilitator for educating children with mild-moderate autism in mainstream classrooms.

As one of the administrators from a mainstream school said: "I cannot see any drawbacks related to inclusion of children with Autism in mainstream classroom when they are provided will all the support they require".

An excerpt from another administrators' interview sheds further light on the matter: "Initially, I was really afraid of admitting students with Autism in my school, I was worried about their behaviors and was unsure about the consequences. I think it was not possible if I was doing this on my own without support from the rehabilitation center; but because of the training program and the initiatives taken by the rehabilitation center, things went fine. I think we can learn more and do something for such children if we work as a team.

Yet another administrator said the following which further highlights the positive aspects of community school networking: "The rehabilitation center has provided a resource teacher who handles autistic children in the inclusive setup. The professional handling of the resource teacher and involvement of rehabilitation center has provided guidelines to our teacher in handling day to day academic and behavioral issues. The community school networking model has indeed created many advantages for the school and for teachers' professional development"

Teachers also took a similar stance regarding the effectiveness of community school networking model. 5 out of 6 teachers reported that such networking was not only beneficial for children autism but it could also facilitate teachers' professional development. Considering this aspect, a teacher from the mainstream school settings said the following: "We have to keep the entire class very engaged because the students need stimulation and activities in the class. Incorporating physical movements and motor activities throughout the day for children with autism has made my class environment very engaging which is surely a productive thing that is happening for other students as well."

### Opportunities for socialization for children with Autism

Teachers reported that including children with autism in mainstream classroom has given them the opportunity to socialize and adopt positive behaviors from normal students in classroom. A teacher said "By including children with Autism in regular classroom, an exposure to with the normal children and normal settings is given to them. They learn rules and regulations of schools and behave accordingly. A teacher from another school reported "The environment of the school is

helpful for overcoming problems related to disability. This gives them chance to learn from other children.

The child learns routine school pattern and learns manners from other normal children. They sit like other children, have their lunch, and learns to play with other children. I have observed that the child enrolled in playgroup used to wander around aimlessly in the classroom when he was admitted but with the help of the resource teacher, I made him sit in my class and behave like other by saying: ‘look all children are sitting, look all other children are coloring’.

### **Changes in Behavioral Patterns**

Teachers of mainstream school reported that they have observed changes in behaviors of students with Autism. The disruptive behaviors were more prominent in initial days but over time they noticed a reduction in challenging behaviors and learnt how to deal with behavioral issues. For example, a teacher explained her experience with the autistic student “It was not easy, I was totally unaware of the behaviors of the child, though through the workshop, the basic knowledge was there, but I was shocked when I saw child with autism screaming and shouting. I was totally dependent on the resource teacher but by the end of the few months, I have learned that there is certain thing which disturbs them. I have learned that he only screams and shouts when there is loud noise. He doesn’t like loud noise. The recitation of national anthem in assembly also disturbs him a lot, so I learned that he is sound sensitive. Now I allow him to go in isolation when other children are reciting national anthem.”

Another teacher also reported the behavior changes she observed in child with ASD during assembly time. “Like in assembly I have observed that the autistic child was not standing properly in the line in initial days but after some days he started to stand in line like all other students”. Another teacher reported about timely school transitions, “She used to run on stairs after assembly and run for her parents at off timings. I asked the therapist at the rehabilitation center about this since I was worried that he or she will fall. But the therapist asked me to show card labeled walk slowly with pictures and that helped me a lot after some time”.

### **Facilitation of teaching strategies**

The teachers and mainstream school administrators reported that inclusion of children with autism has provided them chances of learning and handling problematic behaviors not only for special children but for the normal children as well. For instance, a teacher reported “I have learned the strategies to handle problematic behaviors which I have never learned before. Making visual schedules for autistic child was a magical technique I have learned. He was not listening to my instructions at all but when I presented visuals for the same instructions, he started to follow them. I also told this method to his parents and his mother followed it at home too.” Another teacher from the school said: “I use to get irritated by children’s behaviors before this experience but after handling the special need child I have learned that there are ways in which things can be managed but still I think I should learn more”.

### **Peer Learning**

The teachers reported that inclusion has developed positive attitudes in normal children about disabilities and they have learned how to help other. For instance, a teacher reported “I feel that normal students started to help that special child in the classroom. They were assisting him to lunch time. Were concerned about him and were giving him instructions like not to do this, not to do that. By doing this they were themselves learning about good and bad behaviors”. Another teacher reported the same thing. Other students in the class became confident about their behaviors. They learned that since the resource teacher is there for help because the child has problem so they started helping the child also.

### **Awareness of Autism**

Teachers and school administrators reported that the community school networking program has facilitated awareness about Autism. They have not learned about the characteristics of autism but also got hands on experience of managing those characteristics in their classrooms. As an administrator reported that “The teachers of my schools have learned a lot from the trainings, they feel that they can manage their classrooms more effectively. They were interested in attending regular workshops provided by the rehabilitation center. Another administrator reported “The process was helpful in developing awareness about Autism and other disabilities. It helped to understand that children with autism can learn like normal children, they are different than those who are retarded and with support they can be a apart of normal schools”.

### **Challenges faced in Community School Networking**

#### **Complaints from Parents of Normal Children**

It was reported by teachers and school administrators of normal schools that the major obstructing they face was from parents of normal children. They received complaints from parents of normal children that their normal children are adopting disruptive behaviors from special needs children in classroom. A teacher reported that “A mother had complaint about the head shaking behavior that her normal child has adopted from child with Autism. She said her child shakes his head at home which looks very abnormal”. An administrator reported another complaint from parents of normal children “They said that we should not include children with disabilities in our normal classroom especially in pre-nursery classes because at this age, children are not aware of positive and negative behaviors and they may adapt negative behaviors from children with special needs”.

#### **Imitation of Disruptive Behaviors**

Teachers reported that they have observed imitation of disruptive behaviors by normal students when children with Autism are included in normal classroom. For instance, a teacher reported that “If children with special needs can learn positive behaviors from normal children, similarly normal students can also adopt negative behaviors from such students. I have observed that one of my students started screaming in classroom like autistic child after he had observed the child”.

Another teacher reported that “When one student is creating disturbance in class, like if one student is crying and demanding sometimes, some others also start to cry”.

#### **Difficulty in managing curriculum content**

Teachers reported that children with autism often lag behind others in the classroom or are inattentive when performing activities. They face difficulty in doing regular classroom activities. For example, a teacher said “When I focus on the behavior of her and tries to adjust her in the classroom I feel distracted from the content and activities I designed for that class. We cannot ignore the syllabus designed for classroom in order to manage behaviors of autistic child” Similarly, a teacher reported “I feel doubtful about whether the child with autism would be able to learn the academic content, as he is often distracted and it takes a lot of time and effort to bring him back to the activities of class”.

#### **Time limitations**

The teachers also indicated that they have 40 minutes period in which they have to do a lot of activities. They are unable to sometimes help such children because of the time constraints. Like a teacher said “We have to pay attention to all students and do the designed activities in the class, so we don't have much time to manage children with such needs”. One of the administrators stated the similar thing “Teachers felt overwhelmed when they are asked that they should support child with autism in regular classes. They were reluctant to spend workshops for managing special needs and modifying their classroom according to the needs of autistic child”.

### **Untrained Teachers**

The teachers also reported that feel difficult to deal with the children with Autism in their classroom. The statement reflects that despite of the training provided to them regarding Autism they didn't have the skills required to deal with the disorder. However, one of the teachers also reported some reservations regarding inclusion by saying "Yes, the support provided by the resource teacher and the training were helpful but still I sometimes feel guilty when I cannot understand the autistic child's needs. According to what I have observed that special needs students should study in special environment instead of a normal school."

### **Dependency on resource teacher**

The administrators of the rehabilitation while reporting the effectiveness of community school networking model indicated that teachers and school administrators are dependent on the resource teacher provided "We have observed that the teachers of mainstream schools were totally depending on the resource teacher that she would handle everything regarding the special child and they don't have to directly engage with the child. Moreover, few teachers were also not providing classroom activity material for special child to the resource teacher because they have the feeling that the child with Autism can damage the material provided".

### **Suggestions for Improvements**

Two main recommendations were provided by the school administrators and teachers which include counseling programs for normal parents and provision of behavior therapist or psychologist in the school. As a teacher said "The therapist who provided were more helpful and they know more about the Autistic child then the resource teacher so It would be helpful if they can be a part of school as well". A school administrator said "The therapist can come to the school and help the children to settle in the classroom. The teachers can do better handling when therapist are directly involved with the children in normal settings".

### **Counseling programs for parents**

Administrators of the mainstream schools reported that involvement of the therapist from rehabilitation center in parents' teacher meetings of normal schools can facilitate the awareness of autism spectrum disorder "Parents of normal children don't accept children with special needs being educated with their children so I guess counseling them regarding the disability can be helpful. You are most welcome in our parents' teachers meeting and to use our school in order to educate parents of normal children".

## **Discussion**

The objective of this study was to evaluate community school networking model for inclusion of children with mild-moderate ASD in mainstream settings. The study is based on the liaison between rehabilitation center and school tailored to the needs of six autistic children diagnosed with mild-moderate autism in inclusive settings. The results reflected that the collaboration among schools and rehabilitation center was particularly helpful for social and behavioral improvement in children with ASD. Moreover, it also supported school staff to develop practices that are more inclusive for autistic students. The findings were consisted with literature which propose community school networking conducive for education of children with autism spectrum disorder in inclusive settings<sup>10, 11, 33</sup>.

All of the participants including administrators and teachers reported positive effects on social and behavioral patterns of autistic children. It was reported that inclusive education serves an opportunity for children with mild-moderate Autism to learn and adopt positive behaviors from their peers in regular educational classrooms. Moreover, inclusion also created awareness among teachers and administrators regarding autism spectrum disorder and teaching strategies to educate these children. As Beghin<sup>28</sup> suggest inclusive classrooms has several advantages, including



lowering the stigma associated with autism, fostering respectful relationships among all kids, instructing all children on how to behave well around others, and raising awareness of autism.

The constraints faced by the teacher's included unacceptability from parents of normal children, learning differences, curriculum modifications, time constraints and dependency on the resource teacher. These results are consistent with study by Olsson and Roll-Pettersson<sup>33</sup>; according to which indicates that preschool teachers lacked the skills and expertise to adopt the advice provided by rehabilitation center in preschool settings. The teachers require additional time and to alter classroom environment to facilitate the needs of children with Autism. The difference in curriculum and evaluation criteria for special children and normal children is also a crucial aspect which requires further research.

The administrators and instructors suggested that curriculum adaptations, awareness campaigns for parents of normal children, and on-staff psychologists can all help to further promote the inclusion of children with autism spectrum disorder and other disabilities.

## Conclusion

Community school networking model have potential for assisting inclusive education and encouraging engagement for all children, including those who are autistic. Rehabilitation center can support school teams in making it easier for autistic children and their normal peers to participate in mainstream classroom. Integration of one-on-one assistant in rehabilitation center and group teachings in inclusive settings appears to be effective for developing positive changes in behavioral and social patterns of students with mild-moderate autism. However, there is a need for future research in the area to overcome the challenges faced in implementation of inclusive practices.

### AUTHORS' CONTRIBUTION:

*Conception or Design:* Dania Shoaib Khan, Dr. Zehra Habib

*Acquisition, Analysis or Interpretation of Data:* Dania Shoaib Khan, Dr. Zehra Habib

*Manuscript Writing & Approval:* Dania Shoaib Khan, Dr. Zehra Habib

The author acknowledge his/her accountability for all facets of the research, ensuring that any concerns regarding the accuracy or integrity of the work are duly investigated and resolved.

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