



**SOCIAL INCLUSION OF CHILDREN
DIAGNOSED WITH AUTISM SPECTRUM DISORDER
IN INDIA: A LITERATURE REVIEW**

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Abstract:

Autism Spectrum Disorder is a neurodevelopmental disorder defined by insufficiency in social communication and social interaction skills and restricted and repetitive patterns of behavior. The aim of this research was to analyze empirical studies on inclusion of

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children with Autism in India over the past 20 years and then propose recommendations for future research. A systematic process was used to conduct the review which included identifying the data source, assessing the quality of our studies, and drawing analysis of our findings. The result included different stakeholder's perspectives which were parents and teachers.

Keywords: social inclusion, children diagnosed with autism spectrum disorder, India

1. Introduction

Autism spectrum disorders (ASD) is defined by insufficiency in two main areas: lack of social communication skills and social interaction; restricted repetitive patterns of behaviour, interests and activities (American Psychiatric Publishing, 2013). The latest research (CDC 2014) detailed the incidence of ASD increasing to 1 out of 68 children. The lack of social skills is defined by irregular eye contact, attention deficit, eccentric speech patterns, trouble with both starting and sustaining conversations, absence of social critical thinking capacity, lack of compassion, and difficulties in deciphering gestures. (American Psychiatric Publishing, 1994). The children face difficulties in expanding their dialect and comprehending what is heard as well as problems in conveying their reasoning (Halfon N., Kuo A. A., 2013).

With the enactment of the UNCRPD (2006), the importance on educating children with Autism in the general classroom setting has proliferated exceedingly and has become an international movement. Inclusive Education (IE) is given mostly dependent on every one of the kids' entitlements to admittance to gain education close by with their companions paying little heed to their inability (S. Shahzadi, 2006).

For the past three decades, the notion of Inclusive Education (IE) has been approved. There are numerous studies taking place on the outcome of IE in relation to children with learning disabilities. Koegel et al. (2011) proved that IE among special needs children will enhance their social skills and progress further in their academics. According to Allen and Cowdery (2005), Inclusive Education (IE) enhances children's social skills.

2. Benefits of Social Inclusion

Frith (1991) proposed that the lack of social and communication skills may affect scholarly conduct which may confine interests, intellectual thinking, trouble with problem solving, paucity in organization skills and having difficulty deciphering information.

According to Lovaas and Smith (2000), children with ASD will benefit more if they are provided with appropriate educational and intervention settings at their young age. The focus on improving social skills in these children can be developed through these educational programmes and curriculums. Inclusive Education provides these benefits

in the form of peer models and social opportunities. The peer model focuses on the children with ASD being benefited from the planned contact with their normal peers in the classroom.

To exhibit their thoughts, children diagnosed with autism demonstrate atypical / unusual behaviours such as being hostile or violent, having a temper or causing harm to themselves (Kulage K. M. et al., 2014). However, their propensity to convey themselves differs depending on their cognitive and communal growth (Baio J. et al., 2014). Thus, children diagnosed with autism are often perceived first by their social incompetency and a drawback in their communication skills.

During any leisure activity, children diagnosed with autism usually keep aloof or engrossed with themselves instead of being a part of the group or engaging in any play activity (Yaylaci F. et al., 2017). In fact, autistic children should be mingled with normal children in order to enhance educational, social learning and build on their emotional skills (Sturmey P. et al., 2014). Sawitree 2014, found that the learning of these children who are diagnosed with ASD is determined / impacted by the enhancement of their socialisation and communication skills with their friends. Moreover, a significant study done by Howlin & Goode (1998), asserted that children with ASD are insufficient in their social skill, which is one of the crucial factors needed in their future working environment and their quality of life.

These children with ASD who have been included in the same classroom as normal children will benefit from the planned contact with their non-disabled peers (J. B. Kupersmidt, 2004).

3. Aim of the Study

This research aims to review and analyse empirical studies on inclusion of children with Autism in India over the past 20 years and then propose recommendations for future research.

This study offers a compilation of initiatives taken for social inclusion of children diagnosed with autism spectrum disorder in India.

The results of this research will help to draw analysis on the strategies used to promote the social inclusion of these children into educational and other community settings.

4. Method

The purpose of this research was to analyse studies on social inclusion in children with autism spectrum disorder in India. A systematic process was used to conduct the review. Three steps were involved to carry on the process which included identifying the data source, a criterion to assess the quality of the studies and drawing analysis of our findings.

The first step was identifying the data base of studies and the authors have included SCOPUS and PubMed. The search keyword strings used were “social inclusion”, “social skills”, “autism spectrum disorder” and, “India”, which appeared in the title, abstract, or keyword fields. The total number of identified articles from the searches of these databases was 29. Duplicate references were removed. After removing the duplicates, the count was reduced to 24 articles.

We excluded 13 articles by reading the title and abstracts of the study. The inclusion criteria included the following: must be an original study published between (2000-2021); must be published in the English language (non-English studies were excluded). The final number of articles in the analysis was 6.

4. Results

Narayan J. et al., (2005) conducted a study aiming to compile information on current education models like special schools, inclusive schools, home-based instruction, and units established by parent groups. The author’s objective was to compile the information on the existing educational situation of children with ASD and analyse the feasibility for replication. In order to achieve the above objective, a questionnaire was sent to all special schools with follow up of one year and the information received was compiled and analysed. The authors found that the choice of model by parents depended on the child’s level of functioning and parental aspirations. About 73% of the parents were eager to send their children to a suitable school, but dissatisfied with the existing facilities.

Another study by Awasthi and Avaramudhan (2019), in which authors used two short and three longitudinal case studies on children with autism to explore the meaning of inclusion and the barriers in the Indian context. A need for understanding inclusion was supported by authors in the context of home environment, education settings and large society. It was found that behaviours such as cooperation, reduction in impulsivity and communication were powerful enablers of inclusion across the different environments. Classrooms also provided a good setting for inclusive experience where fluency was built and appropriate classroom behaviours and specialised training for teachers were targeted.

A study conducted by Shah et al on 560 teachers working in government run schools in Ahmedabad, India was undertaken to determine the concerns of primary school teachers about the inclusion of students with disabilities. A two-part questionnaire was used which gathered personal and professional information of the teachers and the other was a 21 item Likert scale in Gujarati language. It was found that the teachers were least concerned about the lack of social acceptance of the students with disabilities in inclusive education classrooms. Certain parameters were taken into account in order to know why such unacceptability occurred and these were based on gender, background qualification in special education, teaching experience of these teachers and also the number of children with disabilities in a classroom (Shah et al., 2008).

In contrast, a study by Bhatnagar and Das (2014), conducted two focused group interviews with ten participants each and in addition to this, 20 semi structured interviews were also conducted. The respondents in this study were secondary school teachers working in schools in Delhi, selected from four administrative zones. The study focused on determining the attitude of the regular schoolteachers in Delhi towards the inclusion of students with disabilities. Views regarding facilitators of inclusive education were also explored and flexible qualitative data analysis was utilized. The findings showed that the teachers held a positive attitude towards the inclusion of these students with disabilities and also suggested improved infrastructure, changes in policy and provisions for institutional resources.

A study by Tiwari et al. (2015), focused on the identification and the articulation of teacher's perception and belief on providing educational services to students with disabilities in general classrooms. Semi-structured interviews of 15 teachers of public schools in Delhi were conducted. Constant comparative methods were used and the conclusions were drawn which included that different socio-cultural ideologies have impacted the education of children with disabilities and systematic barriers to education have made the teachers accept the concept of inclusion in theory. Barriers such social factors and lack of training opportunities have hindered the implementation of inclusive education.

Karant and Chandhok (2013), conducted a study on 296 children through questionnaires which were collected through email, post, telephonic interviews and face to face interviews. The questionnaire covered three major areas which ranged from family's success on completing the recommendations of the early intervention (EI) program, issues faced in schooling and feedback on the EI program. The aim of the study was to follow up on the educational status of children diagnosed with ASD who had been enrolled for the early intervention program. The findings and recommendations concluded that early intervention helps in the enrolment and retention of children diagnosed with autism in mainstream schools.

Priyanka Nimbair et al., (2019) conducted a study which aimed at understanding peer victimization and its relationships to the self-esteem of the children having Mild Intellectual Disability and Borderline Intellectual Functioning issues. A sample of 40 children met the inclusion criteria. The results indicated that peer victimization was more in regular schools than in special schools.

A review study was done by Padmakumari P. et al., (2017) which focused on systematic examinations of different intervention practices which included improvement in social skills in ASD children practiced in India. The study collated 19 different papers published from 2000-2020 and evidence was presented in nine treatment categories. There was higher participation of males with the ages ranging from 1 year to 16 years.

Another study was done with an aim to explore the classroom practices of teachers influencing positive peer interaction between students with and without disabilities in public schools in Tamil Nadu, Chennai, India. The study also helped to determine the teachers attitudes towards students with disabilities and teacher's self-efficacy to foster

social inclusion. Data was collected was 93 teachers and 923 students in the form of questionnaires, interviews, and classroom observations. The results showed positive attitudes of the teachers towards inclusive education and high self-efficacy to support inclusive schooling (David, R., Kuyini, A. B., 2012).

Few studies also focused on the cross-culture differences to describe social inclusion for children with disabilities. One study done in Ladakh; India explored the meaning of inclusion for children with cognitive disabilities. It was stressed that families should receive as much attention as schools in terms of seeking solutions to maximise social inclusion once the children move back into their families after completing their education. It focused on the need to conceptualize inclusion locally (Koller, D., Pouesard, M. L., Rummens, J. A., 2017).

Table 1

Sr No.	Author	Sample Size	Theme	Data Collection Method	Research Approach	Inclusion Setting
1	Narayan J., Chakravarti S. N., David J., Kanniappan M.	Unknown Sample Size		Questionnaire was sent to all special schools	This study aimed to compile information on the current educational models and to find out the feasibility for replication.	Special schools, inclusive schools, home-based instruction and units established by parent groups.
2	Aravamudhan S., Awasthi S.	Participants (3 boys and 2 girls) aged (4 and 12 years) .	Barriers and facilitators	Case Study	The authors draw upon their clinical expertise spanning 6 and 30 years respectively, use two short-term and three longitudinal case studies of young children with autism to explore the meaning of inclusion, enablers, and barriers in the Indian context.	Home environment, educational settings, and larger society.
3	Karanth P., Chandhok T .S.	30	Early intervention	Data was collected through a questionnaire. Contact modes - email, post, telephonic interviews, face-to-face interviews.	A questionnaire (Appendix 1) designed to obtain information relevant to the child's progress after having moved out of the EI program, focusing primarily on issues related to schooling was designed.	Communication DEALL program at Bangalore

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4	Nisha Bhatnagar, Ajay Das	20 participants	Teachers' perspectives	Semi Structured Interviews (qualitative)	Two focus group interviews were conducted and each group had ten participants. In addition to the focus group interviews, 20 semi-structured interviews were conducted with the teachers selected from the four administrative zones.	35 secondary schools in four administrative zones of Delhi: East, West, North and South.
5	Rina Shah, Ajay Das, Ishwar Desai and Ashwini Tiwari	560 teachers	Teachers' perspectives	A two-part questionnaire was used in this study. (survey)	Part 1 gathered information relating to personal and professional characteristics of the teachers. Part 2 was a 21-item Likert scale titled Concerns about Inclusive Education – Gujarati.	Working in government- run schools
6	Ashwini Tiwari A., Ajay Das, Manisha Sharma	15	Teachers' perspectives	Hermeneutic phenomenology, The data were analyzed using a constant comparative method. (qualitative)	15 semistructured interviews of public school teachers in Delhi were conducted. Each interview, lasting from 30 to 45 min, was recorded and transcribed.	Public school teachers in Delhi
7	Nambiar P., Jangam K., Roopesh B. N., Bhaskar A.	40	Peer victimization and self esteem	Questionnaire	The study utilized a cross-sectional research design with a sample of 40 children who met the inclusion criteria.	The participants were recruited from the outpatient (OP) and inpatient (IP) services of Child and Adolescent Psychiatry Department of the research institution as well as from SS facilities.
8	Alexander, A. E., Padmakumari, P., Padavan, I. D.	19 Studies	Different intervention practices that include improvement of	Studies published from 2000 to 2020 were selected for the study. These studies were drawn from	Review Study	Children with ASD in India

			social skills in ASD that is practiced in India	databases Ebsco, Proquest, PubMed, MEDLINE, science direct and Google Scholar.		
9	David, R., Kuyini, A.B.	Data were collected from a sample of 93 primary school teachers and a total of 923 students	Teacher's perspectives	Questionnaires, interviews and classroom observations	Survey questionnaires and participant observation along with interviews	Punchayat Union Schools (public schools).
10	Koller, D., Pouesard, M.L., Rummens, J.A.	Unknown	Cross Culture Variables	The search was conducted on a biweekly basis from December 2014 to March 2015, using six databases	Peer-reviewed original studies published between January 2004 and March 2015.	Ladakh, India

5. Discussion

The above research gathered studies done on inclusion in the past 20 years. Most of the studies took a descriptive method approach using surveys whereas the others used a qualitative method.

In India there is a huge paucity of research for inclusion of children and rarity of information for inclusion of children with autism in mainstream schooling.

Three of the studies have focused on the perception of teachers on inclusion of children with disabilities. Some studies reflected a positive attitude while some still depicted a question on the whole idea of inclusion. Thus, these studies have found mixed results and there are concerns about teachers' attitudes and knowledge about inclusion. It is noteworthy that none of the studies have focused on the Autism population specifically but have included autism as part of other disabilities.

There is one study that has focused on barriers and facilitators of inclusion and has focused on children with autism. However, the authors have included only 5 children who cannot be a true representation of the autism population in a vast and populous country like India.

Only one study has done a follow up of children who received early intervention and found that children who receive therapy do retain in the schools and are able to adjust better.

6. Conclusion

The prevalence of Autism in India is 0.9% in the age group of children (0-15 years). Research shows that most students perform better when exposed towards the general education curriculum. Children do better academically when in inclusive settings and inclusion provides opportunities to develop a better understanding of relationships.

However, the review of literature states that there is a dearth of research on what has been done on implementation of inclusion of children with autism in India. Teachers' perception has been sought but no studies focused on perception of peers, and caregivers towards the concept of inclusion. One of the studies has studied various models that are availed by parents of children with Autism including mainstream schools and has categorically revealed that 73% parents were unsatisfied with the existing facilities.

It is needed that more research should be done and factors contributing to the understanding and implementation of inclusive education should be studied and more information should be added to the challenges and enablers.

It is also important to examine the effects of inclusion exclusively focusing on the autism population rather than as part of various disabilities.

Conflict of Interest Statement

The authors declare that there is no potential conflicts of interest with respect to the research, authorship and / or publication of this article.

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