

# Perception of School Teachers towards Inclusive Education System in Jodhpur City, Rajasthan, India

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## ABSTRACT

**Introduction:** Many disabled children receive rehabilitation but they find it difficult to get school admission. For successful inclusion, teacher's attitudes and their perception towards disabled children play a crucial role.

**Aim:** To explore teacher's perception towards inclusive education in Jodhpur city, Rajasthan, India and to describe factors contributing to this perception.

**Materials and Methods:** A cross-sectional study was conducted over a period of three months. Two schools {1 Government (G) and 1 Private (P)} were selected from 30 randomly selected wards (total number of school, n=60) and four teachers were targeted randomly from each school (n=240). A 64 item scale; combination of Cochran's 20 items Survey of Teacher's Attitudes Toward Inclusive Classrooms (STATIC) Survey and Littrell's 40-item survey with additional four demographic questions related to experience and pre-service and professional development training was used.

**Results:** In total, 240 teachers were recruited. Of these, 172 teachers (G=49/120, P=120/120) responded; three forms

were excluded due to incomplete information. Hence, 169 forms were analysed. An average score of 'attitude construct' (item 5-24) was 61 where as 'principal support construct' (Item 25-64) was 150. Most of the teachers neither had pre-service training (n=133, 79 %) nor post-professional training (n=109, 65%) for inclusive education. Teacher's attitude construct showed negligible correlation with year of teaching certification ( $Rho=0.178$ ,  $p\text{-value}=0.034$ ) and experience of having disabled students in classrooms ( $Rho=0.198$ ,  $p\text{-value}=0.010$ ); and low positive correlation with pre-service training ( $Rho=0.379$ ,  $p\text{-value}<0.001$ ) and post professional training for inclusive education ( $Rho=0.445$ ,  $p\text{-value}<0.001$ ). Principal support construct showed negligible correlation with all four factors.

**Conclusion:** The current study showed a tendency of positive attitude for inclusive education among teachers in urban schools of Jodhpur, India. This positive perception with professional training and incentives from school authorities can support practical implementation of inclusive education.

**Keywords:** Attitude, Disabled students, Inclusion

## INTRODUCTION

Inclusive Education System (IES) is defined by UNESCO as "a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities and reducing exclusion within and from education" [1]. Though, primarily a western concept, recent decades have witnessed a shift from segregated education system to IES even in developing countries like India [2].

The origin of IES in India can be dated back to Kothari Commission (1964-66) which first mentioned "the education of the handicapped children should be an inseparable part of the education system" [3]. Thereafter, National Policy on Education 1968, emphasised on expansion of education facilities for disabled children in regular school. This policy was also followed by Integrated Education for Disabled Children Programme 1974. National Policy on Education 1986 further strengthened this approach by advocating integrated education in general school for locomotor-impaired children, the mildly disabled children and special education to the severely handicapped. Since then, numerous legislations like Plan of Action (POA); 1992, Rehabilitation Council of India Act (RCI-1992), Persons with Disabilities Act, 1995, National Trust Act 1999, The Education Welfare Act, 2000 and The Equal Status Acts, 2000 to 2004 have been formulated which provide equal opportunities, protection of rights and full participation for differently abled children [4]. Sarva Shiksha Abhiyan programmes were also launched to achieve goal of universalisation of elementary education with a zero rejection policy [5].

In spite of available policies and increased awareness in country, available literature revealed that disabled children often get excluded from education systems [6]. As per 2003 Census of Individuals with Disabilities, 90% of children with disabilities in India were unserved. Croft A, suggested that disabled children continued to be denied access to even basic education especially in rural and remote areas of developing countries [7]. Even if these children did manage to go to school, they were often marginalised. Moreover; Forlin C, in his review on IES in developing countries, suggested that many of them leave school early due to poverty, distance, or an inappropriate curriculum especially in developing countries, such as South Africa, Bangladesh and India [6].

Therefore, implementation of IES becomes challenging at multiple levels in developing countries like India. Successful inclusion education requires a fundamental redesigning of school (and learning) culture to add flexibility in available infrastructure and a sense of responsibility towards educating a child irrespective of their abilities and disabilities. Hence, the attitude towards inclusion is essential component for its implementation. Since, teachers are the main propagators and motivators for any education system; they also play a crucial role in building an inclusive society as mentioned by previous studies. Hence, these studies have often explored the attitude of teachers towards IES [8-10].

The IES basically acts as a link between medical rehabilitation and community integration for disabled children and thus, is instrumental in their social rehabilitation. Medical rehabilitation maximises their functional abilities and helps in partially overcoming their disability. However, this functional improvement becomes futile if it is not

translated into enhanced community participation and integration. Schooling or IES therefore, is the first step in this translation phase for social rehabilitation [11]. It was noted in the area of current study that in spite of completing rehabilitation programme successfully at the Tertiary Care Institute, many disabled children faced difficulty in school admissions. This improper implementation of IES hindered community integration for these disabled children. Therefore, the present study was designed by rehabilitation service providers at the institute with an aim to explore teacher's perception towards inclusive education in Jodhpur city in Rajasthan, India and to describe factors contributing to this perception.

## MATERIALS AND METHODS

A cross-sectional study was planned and conducted from 15<sup>th</sup> January 2017 to 14<sup>th</sup> April 2017 among various schools in urban area of Jodhpur, India. Ethical clearance was obtained from the Institutional Ethical Committee. Jodhpur district with an area of 22,850 square kilometres is divided into 17 blocks with a total population of 3,686,000 [12]. The district has a total number of 5772 schools with 3725 government schools (rural: 3485, urban: 240) and 1929 private schools (rural: 1084, urban: 845). Teachers working in government schools are 15,175 and in private schools are 20,464; thus, the average number of teachers per school in government sector being four and in private being 10 [12-14]. The district has 22,216 disabled children/children with special needs (urban: 7090, rural: 15,126). A total of 5487 children with special needs were enrolled for 2015-16 year from class I to VIII. A drop-out rate of 9.54 and repetition rate of 0.88 was noted. Nearly 52.1% schools had ramp facility [12]. Jodhpur city is divided into 65 wards for administrative purposes and hence, 30 wards were selected through simple random sampling method. From each ward, two schools were randomly selected; one from the government sector and one from the private sector. One visit per week was made. During each visit, five schools were covered. Four teachers per school were targeted as per random sampling for a representative data from each of the schools.

The questionnaire was taken from an open access survey tool designed by Walker TJ, for study done at Loyola University Chicago [2]. The designed tool by Walker TJ, included four demographic questions related to teacher's experience, pre-service and professional development training for educating disabled children with remaining questions from two established tools, namely Cochran's STATIC survey and Littrell's survey. Cochran's STATIC tool was originally used to survey teachers' attitudes toward inclusion. The 20 item survey instrument consists of statements regarding inclusion of students with disabilities in general education classroom. Agreement level is indicated using a six point Likert's scale with 0 as Strongly Disagree and 5 as strongly agree. Reverse coding is used for items 3, 4, 7, 9, 13 and 15. The sum of all items equals to an index of their attitude towards inclusion. Higher scores denote a more positive attitude toward inclusion and vice versa. Cochran noted a Cronbach alpha reliability coefficient of 0.89 for this tool. Littrell's 40 item survey explores principal support including questions about emotional, instrumental, informational, and appraisal support. It uses a 4-point Likert's scale indicating 1 for no extent and not important to 4 as great extent and very important. A Cronbach's alpha reliability coefficient of 0.80 to 0.93 was noted for individual construct of original survey instrument [2]. Thus, the final questionnaire as used by Walker TJ, had 64-items, which was opted for the current study as it gave a broader picture about the outlook of teachers and school authorities [2].

On visit to selected schools, questionnaire was distributed to the teachers and they were explained about the questions. A written informed consent was taken from those who were willing to participate in the study. The confidentiality of the participants was maintained. Filled-up questionnaires were collected and incomplete forms were excluded prior to application of statistical analysis.

## STATISTICAL ANALYSIS

Data was entered and analysed using IBM SPSS statistics version 22.0. Descriptive statistics such as mode and median were calculated for each item. Normalcy was checked using Kolmogorov-Smirnov test. An average score was calculated for each participant for constructs of attitude (items 5 to 24) and principal support (items 25-64). Correlation was determined using Spearman's rho test between average scores of the constructs and the four demographic items. Also, the correlation was also performed between the two construct averages. Level of significance was set at 5%.

## RESULTS

A total of 240 teachers were targeted, 120 each in government and private school category. A total of 172 forms were filled. Of them, three forms were excluded due to incomplete information. Hence, data from a total of 169 forms (G=49/120, P=120/120) was analysed. On enquiry about low response from government school authorities and involved government teachers, they cited various reasons such as shortage of staff, poor teacher pupil ratio, time issues, pre-engagements with other meetings and training workshops and other personal reasons.

Of the participating teachers, 59 (35%) received their teaching certification between 2009 and 2013. Two teachers received it way back in 1984 (oldest in range) and one teacher in 2017 (the newest in range). Nearly 55% teachers had no experience or less than one year of experience in having and teaching disabled children in their classroom. Most of the teachers neither had pre service training (n=133, 79 %) nor post professional training (n=109, 65%) for IES. [Table/Fig-1] describes teacher's distribution in relation to their experience (in years) of having disabled students in their classroom. The frequency distribution of teachers who have attended pre-service workshops and professional development workshops (post service), focussing on IES for children with special needs are shown in [Table/Fig-2,3]. Data obtained for first construct (teachers' attitude) was normally distributed and data was skewed for second construct (principal support).

Experience of including and teaching disabled children in classroom (in years)	Frequency distribution of teachers (n=169)	
	Frequency	Percentage (%)
0-1	94	55.62
2-3	39	23.07
4-5	13	7.69
6-10	10	5.91
More than 10	13	7.69

**[Table/Fig-1]:** Experience (number of years) of having and teaching disabled students in classroom.

Number of pre-service workshops	Teachers attending (n=169)	
	Frequency	Percentage (%)
0	133	78.69
1-2	25	14.79
3-4	11	6.5

**[Table/Fig-2]:** Number of teachers attending pre-service workshops focussing on inclusive education system for children with special needs.

Number of professional developmental courses	Teachers attending (n=169)	
	Frequency	Percentage (%)
0	109	64.49
1-2	31	18.34
3-4	17	10.05
5 or More	12	7.10

**[Table/Fig-3]:** Number of teachers attending professional developmental workshops focussing on inclusive education system for children with special needs.

The average score for composite Attitude construct score (item 5-24) was 61 with a maximum score of 86 and minimum score 30 suggesting that most of the participants marked option 3 (Not sure, but tend to agree). Among the attitude construct items, 76% (n=129) teachers either agreed or they tend to agree that they were confident about teaching children with special needs; 59% (n=100) felt that inclusion in regular classrooms enhances their self-esteem and 63% (n=107) agreed that this helps these children imbibe social skills from normal children. Around 71% (n=120) teachers believed that most children could learn in most of the environment and 65% (n=110) teachers were aware regarding the need to make requisite special physical arrangements in the class rooms.

The average score for composite principal support construct score (item 25-64) was 150 with maximum score 160 and minimum score 40 suggesting option 4 as a response for most of the items by the participants. According to Spearman's rank two-tailed correlation test, negligible correlation was found between teachers' attitude construct and principal support construct ( $r = 0.252$ , significant at .01 level).

Further analysis showed that teacher's attitude construct has negligible correlation with year of teaching certification ( $Rho=0.178$ ,  $p$ -value=0.034) and with experience of having disabled students in classrooms ( $Rho=0.198$ ,  $p$ -value=0.010), though  $p$ -value was  $<0.05$ . The construct has low positive correlation with both pre-service training ( $Rho=0.379$ ,  $p$ -value  $<0.001$ ) and post-professional training for IES ( $Rho=0.445$ ,  $p$ -value  $<0.001$ ) and was statistically significant ( $p<0.05$ ). Principal support constructs revealed negligible correlation with all four components. The size of correlation for attitude construct score and principal support construct score, with questions 1-4 of the survey tool, respectively described in [Table/Fig-4,5].

Questions 1-4	Attitude construct	
	Rho Value	p-value/significance
Year of training certificate	0.178	0.034*
Experience of disabled students in class room	0.198	0.010
Pre-service workshop	0.379	$<0.001^*$
Professional development workshop	0.445	$<0.001^*$

**[Table/Fig-4]:** Number of teachers attending professional developmental workshops focussing on inclusive education system for children with special needs.  
[\*-Significant]

Questions 1-4	Principal support construct	
	Rho Value	p-value/significance
Year of training certificate	0.096	0.260
Experience of disabled students in class room	0.013	0.864
Pre-service Workshop	0.109	0.158
Professional development Workshop	0.083	0.258

**[Table/Fig-5]:** Correlation analyses between items 1-4 of survey tool with principal support construct score.

## DISCUSSION

The study revealed a tendency towards an overall positive attitude among school teachers in urban Jodhpur regarding IES. This perception was observed even though more than 50% of teachers had less than one year experience of having disabled children in their classroom. This suggests that teachers may agree for IES at theoretical level, but actual implementation in terms of teaching them is limited. This is in concordance with previous researchers, Avramidis E and Norwich B, found positive attitude but no evidence of acceptance of a total inclusion [15]. Studies by Carrington S and Brownlee J; David R and Kuyini AB have

also mentioned that in spite of belief in inclusion on a theoretical level, teachers continue to have a negative attitude towards its implementation [16,17].

It was noted that approximately 60% teachers in current study were aware regarding the positive impact of IES on disabled students in terms of better academic performance and enhanced social skills, as suggested by previous studies by, Vaughn S et al., Klingner JK et al., Peetsma T et al., Luster JN and Durrett J [18-21]. The participating teachers also showed willingness to make special physical arrangements in the classrooms to meet needs of disabled children, thereby understanding that classroom modifications are essential requisites for inclusion of disabled children, as mentioned previously by Ahmad FK, and Singh YP and Agarwal A [22,23]. This implies that majority teachers in current study were familiar about changes required for successful implementation of IES within classrooms and school.

The current study showed that more than 50% teachers had less than one year of experience of having disabled children in their classrooms, in spite of obtaining teacher certification much earlier. Only 13 teachers, i.e., 7.69% had children with different abilities in their classroom for more than 10 years of teaching experience. Also, more than two third of participating teachers had no pre or post service training for IES. This pattern is similar to studies done by Das AK et al., and Bhatnagar N and Das A in Indian schools and in contrast to the study by Walker TJ, in United States [2,24,25]. The findings in present study imply that teachers in developed countries receive better exposure and training for IES than developing countries. Infact, Singh YP and Agarwal A, in their review discussed that most of main stream teachers in India, at all levels, lack scientific knowledge and basic awareness about children with disabilities [23].

Another observation of the present study was decreased participation and response from government schools than private schools. Though the government teachers had training workshops related to visual or hearing disabilities, education regarding other impairments was comparatively lesser. A few of them refused to fill the forms due to no exposure to such children so far and their inability to comprehend the concerns of these children. This is in contrast to previous study by Bansal S, where equal participation from both government and private schools was noted [26].

The current study also aimed to explore various factors affecting the teacher's attitude towards IES. It was seen that amount of pre-service courses and professional development workshops focussing on inclusion had a positive relationship with teachers' attitude towards IES. This has been observed in numerous past studies [2,6,23-25]. It has been shown that these workshops help in sensitising teachers about needs of disabled children, enhances their skills for differentiated instructional strategies for inclusion, enables proficient usage of assistive technology and provides adequate opportunity for multimodality learning. This in turn makes it easier for the teachers to accept disability and equips them better to teach challenged children in their regular classroom as mentioned in a review by Kumar A [27]. Also, rather than a single short term program, multiple in-service programs as a part of long term staff development plan is more beneficial, as stated previously by David R and Kuyini AB [17].

Results of the current study showed negligible relation between teacher's attitude and year of obtaining teaching certification. This is in accordance with previous study by Walker TJ, indicating that amount of teaching experience does not affect attitude toward inclusion [2]. Also, in present study, a negligible correlation was found between the attitude and experience (in years) of having disabled children in classroom. This is in contrast to findings



of studies done by Walker TJ, and by Edmunds A, where longer duration of experiences in an inclusive setting influenced teacher's perception in a positive way regarding IES [2,28]. The negligible correlation in present study could be attributed to low number of participants with longer duration of experience, a theoretical perception of IES than actual implementation, an incomplete understanding of IES without essential training and teaching disabled children without knowledge about their concerns and needs.

The current study revealed a negligible correlation of principal support and attitude of teachers. This is in contrast to previous studies where the principal support and administrative support has a strong impact on attitude of teachers about IES [23,29]. A good support system provides these teachers with appropriate materials and infrastructure, adequate planning time, emotional support, opportunities for professional development and enhanced skills to teach children with disabilities and therefore, helps in imbibing a positive perception in the teachers [2,23]. This association was, however, found to be weak in the current study highlighting again the theoretical aspect of teacher's perception, incomplete understanding of IES in view of limited exposure and inadequate training workshops and inability to objectively quantify the role and support needed from principal and school authorities in order to teach a disabled child. It was also observed that the principal support construct was negligibly correlated with other teacher related variables like years of teaching experience, years of having disabled children in classroom, amount of pre-service and professional training workshop. These findings are again attributed to above cited reasons. Further studies exploring teachers' perception in schools from rural areas of the region should be planned.

Also, studies investigating attitude of school authorities, education administrators and special educators are recommended.

## LIMITATION

The data for study was collected from teachers belonging to a selective geographic region and that also only from urban areas. Hence, the perception about IES may not be a representative of all teachers from other regions in India.

The study had low participation rates from government schools and did not include perception about IES from school authorities, education administrators and special educators and from parents of students with disabilities, all of which could influence the responses obtained from these mainstream school teachers.

The study did not investigate other child related factors such as class size, number of students with disabilities in class, type and severity of disabling conditions which can also affect teachers' attitude for inclusive education.

## CONCLUSION

This study hence concludes that though school teachers in urban Jodhpur have a tendency for positive attitude about IES, the actual implementation in mainstream schools is still a concern. This willingness and positive attitude of teachers once collaborated with professional developmental training and supportive incentives from the principal and school authorities can lead to an objective understanding of IES, address the barriers for IES and bring it into extensive practise. The appropriate implementation of inclusive education will then help provide education for all, irrespective of their disabilities and limitation.

Studies designed to identify other factors influencing implementation of IES such resources and infrastructure in local area, perception of parents and care-givers, acceptability of IES among care-givers and disabled children, child related variables like class size, type

of disability and severity of disability will shed light on remaining barriers and facilitators of IES.

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