



ATTITUDE OF HEALTHY CHILDREN TOWARDS PEER WITH SPECIAL NEEDS: A SURVEY IN SCHOOLS OF PUNE CITY

Atiya A Shaikh¹, Jai Vaishampayan²

¹Professor, ²Intern, DES Brijlal Jindal College of Physiotherapy, Pune, Maharashtra, India

ABSTRACT

This study was conducted to analyse attitude of healthy children towards their peers with special needs using Chedoke-McMaster Attitudes Towards Children with Handicaps Scale. 361 healthy school children were screened using Chedoke-McMaster Attitudes Towards Children with Handicaps Scale over a period of 6 months to analyse their attitude towards disabled children. 73.6 participants showed neutral attitude as per total CATCH score. P value was 0.4088 for comparison between Familiar and non familiar children's attitude. Question specific attitude was found to be neutral to positive in more than 50% of the participants. 0.3947 (No significant difference) was found when age wise comparison was done for attitude score. Gender wise score comparison showed p value to be 0.7466 (No significant difference). Thus, general attitude of children in this study leaned towards Neutral to positive side. Attitude did not seem to change as per Familiarity with disabled peer, Gender, Age.

Keywords: Healthy Children, Disabled children, Attitude, Chedoke-McMaster Attitudes Towards Children with Handicaps Scale/ CATCH Scale, Pune

INTRODUCTION

Disability is defined as a physical or mental impairment that substantially and persistently affects a person's ability to perform everyday activities.¹ Over 15% of the global population lives with some form of disability, a number that continues to rise. Around 25% of these individuals are under the age of 18.² More than 85% of people with disabilities reside in developing countries, where they face significant disparities in healthcare, transportation, education, employment, and other essential areas of life. These individuals often experience neglect, discrimination, and stigma.^{2,3} Disability is a multifaceted issue that involves both personal and social factors that need to be addressed. Inclusive education has been widely recognized as a key strategy to promote the integration of people with disabilities into communities worldwide. However, many developing countries continue to face significant challenges in effectively implementing inclusive education.⁴ A positive societal attitude is crucial for the successful implementation of inclusion. However, numerous studies emphasize that one of the main barriers to achieving inclusive education is the negative attitudes prevalent in society.⁵ Over all prevalence of people with disabilities is 4.52% of the population, i.e., 63.28 million, according to the ICMR's publication from the NFHS-5 survey 2019-21.⁷ According to UDISE+ 2021-22, 0.85% of students enrolled in schools were children with special needs (CwSN).⁸

Inclusion of such children with disabilities largely depends on the attitudes of their peers. Unfortunately, there is limited literature exploring how typically developing children perceive those with physical disabilities especially, for India and Maharashtra. Understanding these attitudes is crucial, as it can help in policy development and for enhancing the implementation of inclusive education, as well as to support the broader social integration of people with disabilities. Therefore, current survey was conducted with the objective of understanding the attitudes of neurotypical children towards those with special needs. This was done by

assessing their general attitudes using the Chedoke-McMaster Attitudes Towards Children with Handicaps Scale.⁹ This multifaceted tool that encompasses all the essential components involved in attitude formation, including affective, behavioral, and cognitive aspects. It is highly reliable, with a coefficient alpha of 0.90, demonstrates internal consistency, and exhibits strong construct validity, with a value of 91%.^{9,10}

METHODOLOGY

Institutional Ethics Committee Clearance of DESBJCOP, Pune was taken. 361 healthy children of age group 9-13 years participated in this study (calculated using Epi info software with confidence limit 5%, expected rate 50%). Consent and permissions from school authorities, parents and ascent of a child to conduct the study were taken. Since a local translation of the Chedoke-McMaster Attitudes Towards Children with Handicaps (CATCH) Scale was unavailable, the study included children who were fluent in reading and understanding English. According to a study by Bossaert and Petry (2013) on the factorial validity of CATCH, factorial invariance was observed across gender, disability status, and awareness related to certain questions in the scale.¹¹ As a result, the authors recommended using only seven items for analysis. These seven items were found to be a better fit for data collection, so instead of using all 36 items, only the seven suggested items were included in the analysis for drawing conclusions.

To assess the suitability and understanding of the CATCH questionnaire, 10% of the total sample size (36 children) were initially given the questionnaire. After confirming that these participants understood the questions correctly and found it easy to complete, the rest of the participants were given the same questionnaire. The questions were read aloud and explained to the participants, who were then asked to respond on a provided sheet. Care was taken to ensure that all participants received the same instructions and explanations. The investigator allowed sufficient time for participants to read each question and mark their answers. The questionnaire was filled out in groups or classes, with the investigator offering additional clarification if any questions arose. These steps helped to ensure consistency in understanding and literacy levels across participants. Cluster sampling was used for data collection. The scores obtained were calculated according to the manual provided with the CATCH scale. Statistical analysis was performed using the Mann-Whitney U test for inter-group comparisons and the Kruskal-Wallis test for age-wise comparisons of attitudes, using SPSS version 22.0.

RESULTS AND DISCUSSION

Attitudes are a complex mix of thoughts, beliefs, values, and experiences. As we grow, our interactions and the way we are nurtured contribute to the formation of our attitudes.^{12,13} In this study, the general attitude of children towards persons with disabilities was found to be neutral, although slightly positive (as shown in Graph 1). This neutral-to-positive attitude likely reflects under-exposure to individuals with disabilities. However, such attitudes can be transformed into more positive ones through nurturing and by providing children with the necessary knowledge and understanding of individuals with disabilities.

A study by Gaad et al. (2004) demonstrated that attitudes are culturally dependent, similar finding was also observed in the current study.¹⁴ The scores in this study were lower than those obtained in similar studies conducted in Israel, Nigeria, Canada.^{15,16,17,18} This aligns with previous research indicating that attitudes toward disability vary across cultures.¹⁴

As seen in Graph II, more than 50% of the neurotypical children showed a positive response for including special children in their life and sharing peer specific things with them. These were specific questions suggested by Bossaert and Petry (2013).¹¹

As noted in table II, only 5% of the participants had direct knowledge or interaction with persons with disabilities, while the remaining 95% of the children had no such exposure. This proportion is notably lower as compared to studies conducted in other countries. For example, in a study from Nigeria, 32.4% of children had a close friend or relative with a disability, and in Israel, 50% of children reported having a close friend with a disability.^{15,17,18} This suggests that Indian children are less exposed to individuals with disabilities, which could be attributed to several factors like:

- Rejection of children with disabilities by normal schools
- Preference of parents of disabled children to keep the child at home til they are independent .
- Limited interaction between children with disabilities and neurotypical children.
- Lack of awareness regarding the schooling options for children with disabilities.
- Improper implementation of inclusive education policies.
- Biased attitudes and apathy from both adults and healthy children towards individuals with disabilities.

These findings highlight the need for increased awareness of inclusive education within the community, aimed at both children with disabilities and their parents. It is crucial for government policies, school authorities, teachers, and neurotypical children to strictly adhere to inclusive education norms in order to bridge the gap between the two groups.

Age can be an important factor in shaping attitudes, as increased maturity may lead to the development of sympathy and a sense of responsibility, potentially fostering more positive attitudes towards people with disabilities. Previous studies have included participants from different age groups, making it difficult to draw a definitive conclusion about this hypothesis. In the current study, the scores of participants were compared across age groups to investigate this hypothesis. However, no significant difference was found when the Kruskal-Wallis test was applied to the attitude scores by age (as shown in table III).

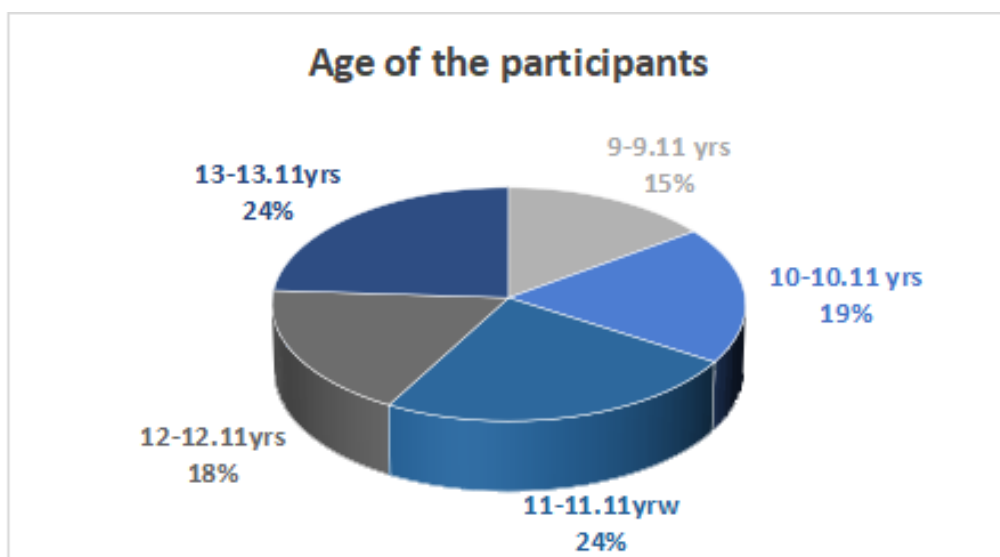
It is commonly believed that females tend to be more sympathetic than males. Surprisingly, in this study, there was no significant difference in the attitudes of boys and girls (as seen in Table IV). These findings differ from those of a Nigerian study on inclusive education, where girls showed a more positive attitude compared to boys.¹⁸ Similarly, Tirosh et al. (1997) demonstrated the effect of gender in their study, showing that Canadian girls had significantly higher scores on the CATCH scale than boys.¹⁵ Other studies have also suggested that boys tend to have more negative attitudes towards individuals with disabilities compared to girls.¹⁹ However, no gender difference was found in attitudes in an Israeli study, and a study conducted in Jaunpur, India, also showed a negative correlation between gender and attitude formation.^{20,21}

Although close contact with people with disabilities and endorsement by authorities and laws are considered optimal criteria for attitude change (Allport, 1954; Pettigrew & Tropp, 2006),^{22,23} the participants in this study showed a different response. When the attitude scores of children who had been exposed to individuals with disabilities were compared with those who had not been exposed, no significant difference was found, as assessed by the Mann-Whitney U test (as shown in Table II). This suggests that, despite theoretical expectations, exposure alone did not lead to a measurable difference in attitudes in this sample.

In conclusion, the general attitude of children in this study leaned towards the positive side. While these attitudes were found to be consistent across age groups and genders, efforts should be made to preserve and, if possible, enhance children's understanding and knowledge of individuals with disabilities. Fostering a more positive and inclusive attitude will benefit the holistic rehabilitation of individuals with disabilities and encourage their full participation in the community.

TABLES AND GRAPHS

Graph 1-Distribution of participants as per Age



Graph 2-Distribution of participants as per their attitude (decided by CATCH Score)

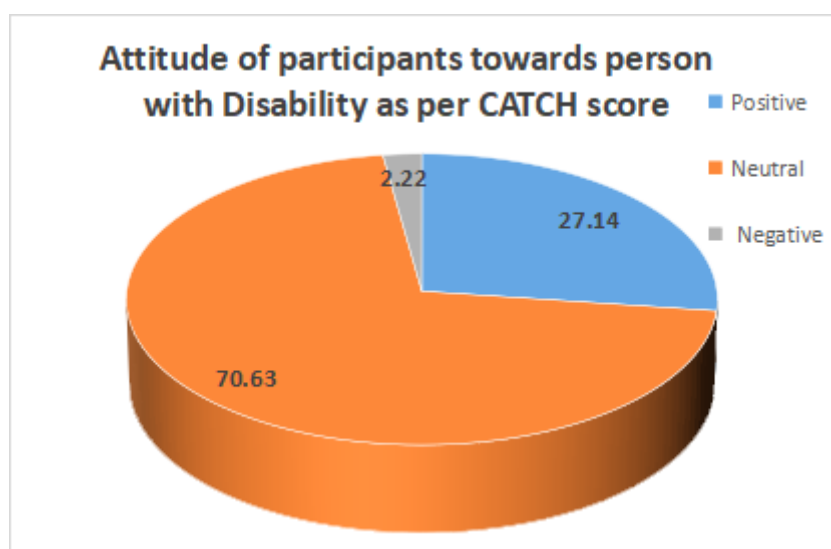
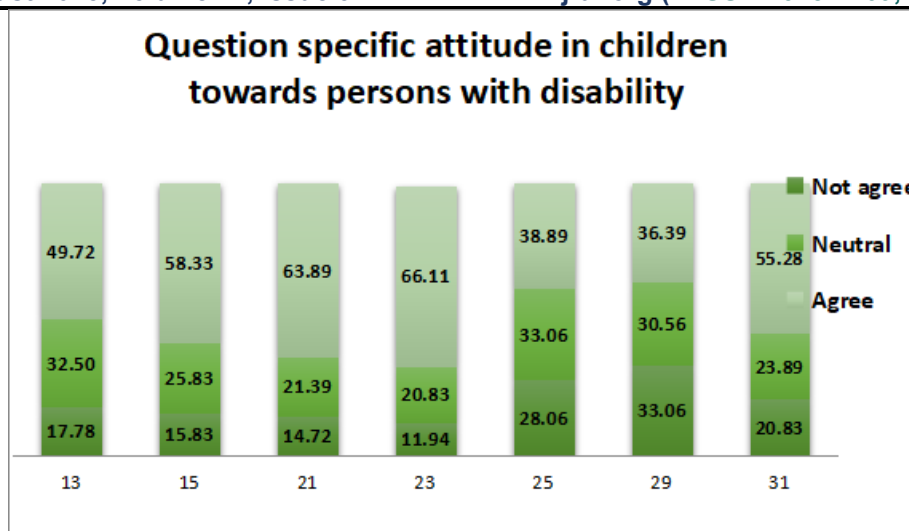


Table 1-Comparison of attitude of participants as per familiarity with the disabled person

	MEAN	SD
Knowing the persons with disability	17	7
Not knowing the persons with disability	17	5
P value	0.4088	
Inference - No significant difference found		
Test used - Mann Whitney U test		

Graph 3-Analysis of participant's attitude as per specific questions in CATCH

Question No	Question
13	I would like child with disability living next door to me.
15	I would be happy to have child with disability as a special friend.
21	I would be pleased If a child with disability invites me to his house.
23	I would feel good doing a school project with child with disability.
25	I would invite a child with disability to sleep over at my house.
29	I would tell my secrets to a child with disability.
31	I would enjoy being with a child with disability.

**Table 2-Agewise analysis of participant's attitude**

Age in years	Mean score	SD
9	16	7
10	18	6
11	16	6
12	17	5
13	17	5
P Value 0.3947 (No significant difference)		
Test Used Kruskal Wallis		

Table 3- Comparison of attitude as per CATCH score in Girls and Boys

	MEAN	SD
Boys	17	7
Girls	17	5
Inference	No significant difference found	
P value	0.7466	
Test Used	Mann Whitney U test	

ACKNOLEDGMENT

Authors would like to thank members of IEC DESBJCOP,Pune for their inputs in study design and Principals of schools for allowing for data collection.

REFERENCES

- Definitions of Disability, a word used in daily conversations that holds different meanings for different people.(Internet) Disabled World (23/12/2009) www.disabled-world.com
- World Report On Disability (internet) World Health Organization <https://www.who.int/disabilities>
- The Convention on the Rights of Persons with Disabilities and its Optional Protocol. (internet) United Nations Organization (13/12/2006)
- Garuba, A. Inclusive Education in the 21st Century: Challenges and Opportunities for Nigeria. Asia-Pacific Disability Rehabilitation Journal.2003. 14, 191-200.
- Ajuwon, A.J.Benefits of Sexuality Education for Young People in Nigeria. African Regional Sexuality Resource Centre Lagos.2005.
- Rousso H. Education for All: a gender and disability perspective.2015.
- Pattnaik S, Murmu J, Agrawal R, Rehman T, Kanungo S, Pati S. Prevalence, pattern and determinants of disabilities in India: Insights from NFHS-5 (2019–21). Frontiers in Public Health [Internet]. 2023 Feb 27;11.
- <https://dsel.education.gov.in/inclusive-education>

- Vignes C, Godeau E, Sentenac M, Coley N, Navarro F, Grandjean H, et al. Determinants of students' attitudes towards peers with disabilities. *Developmental Medicine & Child Neurology* [Internet]. 2009 Mar 11;51(6):473–9
- March-Llanes J, Mas-Ruiz L, Moya-Higueras J, Rius-Torrentó J, Estrada-Plana V, Bañeres J, et al. Chedoke-McMaster attitudes towards children with handicaps scale for traditional sporting games (CATCH-TSG): initial validation in 7 different languages in adult and young populations. *Frontiers in Psychology* [Internet]. 2023 Sep 25;14.
- Bossaert G, Petry K. Factorial validity of the Chedoke-McMaster Attitudes towards Children with Handicaps Scale (CATCH). *Res Dev Disabil*. 2013 Apr;34(4):1336–45.
- Maurya NAK, Parasar NA. Attitudes toward Persons with Disabilities: A Relationship of Age, Gender, and Education of Students. *International Journal of Indian Psychology* [Internet]. 2017 Sep 25;4(4)
- Lupu E, Cernat C, Petre C. Identifying the Attitude of Healthy Individuals towards Disabled Children – A Chance to be Educated for all. *Procedia - Social and Behavioral Sciences* [Internet]. 2011 Jan 1;29:266–71.
- Gaad, Eman. “Cross-cultural perspectives on the effect of cultural attitudes towards inclusion for children with intellectual disabilities.” *International Journal of Inclusive Education* .2008 : 311 - 328.
- Tirosh E, Schanin M, Reiter S. Children's attitudes toward peers with disabilities: the Israeli perspective. *Dev Med Child Neurol*. 1997 Dec;39(12):811–4.
- Manetti M, Schneider BH, Siperstein G. Social acceptance of children with mental retardation: Testing the contact hypothesis with an Italian sample. *International Journal of Behavioral Development* [Internet]. 2001 May 1;25(3):279–86
- Rosenbaum PL, Armstrong RW, King SM. Children's Attitudes Toward Disabled Peers: A Self-Report Measure. *Journal of Pediatric Psychology* [Internet]. 1986 Jan 1;11(4):517–30.
- Olaleye A, Ogundele O, Deji S, Ajayi O, Olaleye O, Adeganju T. Attitudes of Students towards Peers with Disability in an Inclusive School in Nigeria. *Disability CBR & Inclusive Development* [Internet]. 2012 Dec 5;23(3):65.
- McConkey R, And BM, Naughton M.A national Survey of young peoples perception of mental handicap. *Journal of Intellectual Disability Research* [Internet]. 1983 Sep 1;27(3):171–83.
- Kumar R, Kumar P. Attitude of Non -Disability Children Towards Children with Disability in Inclusive Setup. *International Journal of Indian Psychology* [Internet]. 2021 Aug 3;9(3).
- Sharma N, Yadav VP, Sharma A. Attitudes and empathy of youth towards physically disabled persons. *Heliyon* [Internet]. 2021 Aug 1;7(8):e07852.
- APA PsycNet [Internet]. Available from: <https://psycnet.apa.org/record/1954-07324-000>
- Pettigrew TF, Tropp LR. A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology* [Internet]. 2006 Jan 1;90(5):751–83.