



Attitudes Towards Disabled Children : A Qualitative Study in Rural Region of Maharashtra

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ABSTRACT

Purpose: The majority of children and young people with disabilities live in developing countries where they face inequalities in education and other opportunities. Negative attitudes constitute one of the major barriers to the development of their potential.

The study aimed to describe the attitudes of students without disability towards their peers with disability, and to assess the role that gender and interpersonal contact play in shaping these attitudes.

Method: A cross-sectional study involving 107 students was carried out in secondary school located in rural area of Maharashtra.

Participants were recruited from a group of 118 students in the three junior classes and senior class one. A semi-structured questionnaire containing items on the “Chedoke-McMaster Attitudes Towards Children with Handicaps (CATCH) scale”, which elicits responses on a Likert scale numbered 0 to 4 (0- strongly disagree, 4-strongly agree), was administered. Data analysis was done using Stata version 12. Descriptive analysis was carried out and association between variables was determined using independent two-tailed t-tests.

Results: The Cronbach’s alpha coefficient of the scale was 0.83. The attitudes of the students in the school was generally positive (M=22.55, SD = 3.79). Female students had higher total scores (M = 24.76, SD = 2.78) than their male contemporaries (M = 19.84, SD = 3.05), $t(103) = 8.55, p = .000$. Having a friend/ relative with a disability was associated with more positive attitudes

among female students.

Conclusion: In this rural setting, the attitudes of students towards their peers with disability were generally positive. Since interpersonal contact was associated with positive attitudes towards students with disabilities, interventions should be directed towards promoting interpersonal relationships in order to build an integrated society.

Key words : attitudes towards peers with disability, school, Rural area Maharashtra

INTRODUCTION

Worldwide, an estimated 650 million people live with disability and about a quarter of them are younger than 18 years (World Health Organisation, 2011). Children and adolescents with disabilities face inequalities in healthcare, transport, education, employment and other aspects of human endeavour. About 85% of them live in developing countries where they often suffer neglect, stigma and discrimination (United Nations Children’s Fund, 20005).

While inclusive education has been proposed as a means of promoting integration among children with disabilities and their peers, its implementation is still a matter of debate in many countries (Garuba, 2003; Ajuwon, 2008). Improved societal attitudes towards people with disability are necessary to create an environment for integration, but studies have shown that negative attitudes towards young people with disabilities are a major barrier to inclusive education (Christensen, 1996; Rousso, 2003).

While it is vital to understand attitudes for policy formulation and implementation of inclusive education and social integration of people with disabilities to succeed, there is paucity of published literature on attitudes of



students towards their peers with disability in India. Further there is no published study which describes the influence that interpersonal contact has on attitudes in the country. This study therefore aims to describe the attitudes of students without disability towards their peers with disability, and to assess the role of interpersonal contact in their acceptance of these peers.

METHOD

The study was conducted in a secondary school in rural area of Maharashtra, India. This school, with about three hundred students, is the only school in local government area. It has six classes, including three junior secondary classes and three senior ones (JSS 1-3 and SSS 1-3). Each of the classes has two or more sections with each section having an average of three students with disability learning alongside their non-impaired peers. The students in the three junior classes and the first senior class range in age from nine to sixteen years.

The study was a cross-sectional survey of student's attitudes towards peers with disabilities. Participants were selected from a group of 118 students in the three junior classes and senior class one (JSS 1-3 and SSS 1) who share the same classrooms as their peers with disabilities, and are familiar with them. The International Classification of Functioning, Disability and Health (ICF) described disability as difficulties encountered in the form of: alteration in body structure and function, limitations in activity and/or restriction of participation or involvement in any area of life (World Health Organisation, 2001). In this school, there were students with total/ partial deafness and/or inability to speak.

The management of the school reviewed the study protocol and gave the permission to go ahead. A total 107 students agreed to participate.

A semi-structured self-questionnaire was used to collect information about the participants, such as their socio-demographic characteristics and whether they had a close friend/relative with a disability.

The second part of the questionnaire included items assessing attitudes towards people with disabilities. The "Chedoke-McMaster Attitudes Towards Children with Handicaps (CATCH)

scale" was used to measure attitudes. This scale was developed by Rosenbaum et al (1988) and was used in the similar study by Beck et al (2001). It has a high validity and reliability, and has used in previous studies to measure attitudes in children up to the age of 16 years (Rosenbaum, 1986; Vignes, 2008). It is one of the most complete instruments as it measures all the three components of attitudes: affect, behaviour and cognition (Feldman, 1993 & Tirosh E, 1997).

The CATCH scale is a self-administered questionnaire which elicits response on a Likert scale numbered 0 to 4 (0- strongly disagree, 4-strongly agree) and consists of twelve items each on affects, behaviour and cognition.

Data collection took place in classrooms and Questionnaires were distributed to the students with the assistance of the class teachers, and it took 20-25 minutes to fill them in.

Data was entered into Stata version 12. Negative items on the scale were coded in a reversed manner. The mean score of items on cognition, affect and behaviour were calculated for each participant. Where one item was missing in a participant's response on a component, the mean score on that component was entered. If two or more items were missing on a component, the participant's record was excluded from the analysis. The Cronbach's alpha coefficient of the scale was 0.83 in this study.

Responses to the items on the CATCH scale were classified into three categories: agree, neutral, and disagree. Strongly agree, as well as strongly disagree, were included in the agree and disagree categories respectively. Socio-demographic characteristics of the respondents and attitudes of the students to their peers with disability were indicated using descriptive statistics.

All the 12 items on each component of attitude – affect, behaviour and cognition- were summed (0-strongly disagree, 4-strongly agree), averaged and then multiplied by ten to give a minimum obtainable CATCH score of 0 and a maximum of 40, with high scores indicating more positive attitudes. In addition, all the 36 items on the CATCH scale were also analysed in a similar manner to obtain the total CATCH



score for each participant, as in the previous studies (Rosenbaum et al, 1986; Tirosh et al, 1997).

The dependent variables were the proportions of the responses to items on the scale, the scores on cognition, affect and behaviour, as well as the total CATCH scores. Data analysis was carried out in Stata to minimise bias. The significance of differences in the CATCH scores between groups of participants was analysed using two-tailed, independent sample t-tests at a level of significance of $p = 0.05$. T-test were carried out between: all male and female participants; all male participants who have a close friend/relative with a disability and those who do not; and all females who have a close friend/relative with a disability and those who do not.

RESULTS

One hundred and seven students completed the questionnaire. Two participants were excluded as a result of incomplete data. Responses of 105 participants were analysed. They were between the age of 10 and 116 years ($M=13.64$; $SD=1.80$); 10-13 ($N=43$); 14-16 ($N=62$). More than half of them were girls (girls $N=58$). Thirty-four (32.4%) of the respondents indicated they had either a close friend or a close relative with a disability.

While ninety-one (86.7%) of the respondents agreed that they would not worry if a child with disability sat next to them in class, twenty-three (21.9%) agreed that they would be afraid. Twenty-one (20%) of the respondents refused to sit next to a child with disability, while fifty (47.6%) agreed with the statement that "Handicapped children are as happy as I am" (Table 1 and Table 5)

Table 1: Participants responses to items on the CATCH scale

Table 2: "Chedoke-McMaster Attitudes Towards Children with Handicaps" score for the whole population

Students in this school had a positive attitude towards their peers with disability ($M=22.55$, $SD= 3.79$). the mean score of cognition was highest while the one on the behaviour was the lowest. (Table 2).

Among the participants, females had higher total scores ($M=24.76$, $SD=2.78$) than males ($M=19.84$, $SD = 3.05$), $t(103) = 8.55$, $p=.000$. female students who had close friend/relatives with disability had significantly higher total score ($M=26.82$, $SD=2.50$) than their peers who didn't ($M= 23.08$, $SD=1.63$), $t(41.24) = 6.57$, $p=.000$. However, male student who had close friend / relatives with disability had non-significant total scores ($M=20.39$, $SD=3.74$) than those who didn't ($M=19.42$, $SD=2.95$), $t(45) = .81$, $p= .425$. Differences in the scores of male and female participants on affect, behaviour and cognition also followed a similar pattern (Table 3 &4)

DISCUSSION

The objectives of the study were to describe the attitudes of the students without disability towards their peers with disability, and assess the roles played by gender and interpersonal contact in influencing their attitudes

Attitude towards students with disability were found to be positive in this population, as the mean score was more than half of total score obtainable on the scale. However, this was lower than the score obtained in a comparative study between attitudes of Israeli and Canadian children towards peers with disability (Tirosh et al, 1997). This can be explained by the fact that attitude is culture-dependent, as shown by the previous studies (Gaad, 2004).

To be seated beside a fellow student in a classroom is one of the fundamental measures of acceptance shown by a class mate. This item had the highest frequency in the agree column of the response table of the CATCH scale. Previous studies described the calculated scores; non reported responses to items on the CATCH scale separately. This response is similar to an item on the questionnaire used by Lupua et al (2011) in which 98.3% of respondents were willing to accept a child with disability as a desk-mate.

In this study, girls generally had more attitudes towards students with disability. In keeping with the findings of previous studies, this showed the role of gender in defining peoples' attitudes (Krajewski and Hyde; 2000; Krajewski et al



2002). Studies have shown that compare to women, men tend to have more negative attitudes towards people with disabilities (Mc Conkey et al'1983). The empathic and caring nature of girls could be the reason for difference. Tirofth et al (1997) also demonstrated the effect of gender in their study. They showed Canadian girls had significantly higher scores on the CATCH scale than their male counterparts. However, there was no difference among the Israeli children.

In the “intergroup contact theory” of attitude change being of equal status, pursuit of common objectives, having intimate contact with people with disabilities and the presence of endorsement by authorities and laws are optimal criteria for attitude change (Allport, 1954; Pettigrew & Tropp, 2006). Since this study setting has all the criteria, with the inclusive-setting atmosphere serving as the endorsement, it was expected that attitudes of students towards peers with disability would be positive.

The different levels of social contact were expected to influence the level of acceptance of students with disability by their non-impaired peers. This was true only for the female participants in this study. This finding is consistent with most previous studies (Rimmerman et al, 2000; Manetti et al, 2001). A study in Hong Kong also described a small improvement in attitudes towards students with disability in a mainstream school (Wong, 2008). Male students who had a close friend/relative with disability had higher scores on the scale. However, this was not statistically significant. This was similar to the findings of a cluster randomised intervention study among grade seven students in France. There was no significant difference in the attitudes of students towards their peers with disability between the intervention, which had a mandatory comprehensive educational project on disability, and the control group which did not (Godeau et al, 2010).

The total scores of participants in this study related well to their scores on the dimensions of attitude. This further supports previous knowledge that attitudes are learned through cognitive, affective, or behavioural processes

(Eagly & Chaiken, 1993). Rosenberg also showed that as one’s cognition changes, one’s attitude also changes (Rosenberg, 1960). Qualitative studies are needed to explore reasons for differences between male and female students about changes in their attitudes towards peers with disability.

LIMITATION

The socioeconomic status of the students in this environment was assumed to be similar. This may however be far from reality. Further, no specific description of disability was used in the CATCH scale. This approach is justified because children with any type of disability elicit qualitatively similar attitudes, although they may elicit different attitudes quantitatively. This study setting was made up of students with partial/ total deafness and/or inability to speak. Hence, there is caution in generalising the study findings to settings where students with other forms of disability are present.

CONCLUSION

The present study demonstrates that a social contact makes a difference to attitudes of students in secondary schools in Rural area of Maharashtra, India towards their peers with disabilities. However, this difference was marginal and non-significant among males. This study can contribute towards knowledge in planning inclusive education programmes in Rural area of Maharashtra, India.

Programmes should be designed towards changing the cognitive and affective dimensions of attitude by providing information to clarify misconceptions, thereby promoting social integration and development of young people with disabilities.

ACKNOWLEDGEMENT

The authors wish to acknowledge the support and cooperation of the authority, members of staff and students of the school where this study was conducted.

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Table 1: Participants responses to items on the CATCH scale

No.	Item	Agree %	Neutral %	Disagree %
1	I wouldn't mind if a handicapped child sits next to me	86.7	3.84	9.5
2	I wouldn't introduce a handicapped child to my friend	21.9	15.2	62.9
3	Handicapped children can do lots of things for themselves	74.3	10.5	15.2
4	I wouldn't know what to say to a handicapped child	35.2	15.3	49.5
5	Handicapped children like to play	57.2	25.7	17.1
6	I feel sorry for handicapped children	16.2	2.85	81.0
7	I would stick up for a handicapped child who was being eased	64.8	15.2	20.0
8	Handicapped children wants lot of attention from adults	12.4	8.57	79.1
9	I would invite a handicapped child to my birthday party	69.5	17.1	13.3
10	I would be afraid of handicapped child	21.9	14.3	63.8
11	I would talk to a handicapped child I don't know	39.1	16.2	44.8
12	Handicapped children don't like to make friends	35.2	21.9	42.9
13	I would like a handicapped child to live next- door to me	49.5	21.0	29.5
14	Handicapped children feel sorry for themselves	54.3	32.4	13.3
15	I would be happy to have a handicapped child for a special friend	53.3	16.2	30.5
16	I would like to stay away from a handicapped child	21.9	11.4	66.7
17	Handicapped children are as happy as I am	47.6	27.6	24.8
18	I wouldn't like a handicapped friend as much as my other friends	34.3	15.2	50.5



19	Handicapped children know how to behave properly	50.5	24.8	24.8
20	In class I wouldn't sit next to a handicapped child	20.0	17.1	62.9
21	I would be pleased if a handicapped child invited to me to his house	57.1	16.2	26.7
22	I try not to look at someone who is handicapped	64.8	20.0	15.2
23	I would feel good doing a school project with a handicapped child	53.3	24.8	21.9
24	Handicapped children don't have much fun	41.9	26.7	31.4
25	I would invite a handicapped child to sleep over at my house	35.2	28.6	36.2
26	Being near someone who is handicapped scares me	17.1	25.7	57.1
27	Handicapped children are interested in lots of things	58.1	25.7	16.2
28	I would be embarrassed if a handicapped child invited me to his birthday	24.8	19.1	56.2
29	I would tell my secret to a handicapped child	30.5	21.9	47.6
30	Handicapped children are often sad	27.6	28.6	43.8
31	I would enjoy being with a handicapped child	56.2	12.4	31.4
32	I would not go to a handicapped child's house to play	24.8	14.3	61.0
33	Handicapped children can make new friends	64.8	17.1	18.1
34	I feel upset when I see a handicapped child	32.4	12.4	55.2
35	I would miss recess to keep a handicapped child company	41.9	25.7	32.4
36	Handicapped children need lots of help to do things	10.5	7.6	81.9

Table 2:
“Chedoke-McMaster Attitudes Towards Children with Handicaps” score for the whole population

Score	Mean	SD	Minimum	Maximum	Median	1 st quartile	3 rd quartile
Total	22.55	3.79	8.05	33.00	22.22	20.14	25.00
Affect	21.26	4.61	8.33	30.00	21.67	18.33	25.00
Behaviour	19.26	4.82	5.00	30.83	19.17	15.83	22.50
Cognition	26.23	4.76	6.67	34.17	25.83	23.33	30.00



Table 3: scores of male participants on the CATCH scale

Group	Total Mean (SD)	Affect Mean (SD)	Behaviour Mean (SD)	Cognition Mean (SD)
Male student having a close relative / friend with disability	20.39 (3.74)	18.38 (4.06)	17.52 (1.77)	25.83 (3.86)
Male student without a close relative / friend with disability	19.52 (2.95)	18.13 (5.65)	16.22 (4.27)	23.68 (5.14)
df	45	45	26.73*	1.12
T Statistic	2.14	0.15	1.41	1.12
P value	.425	.882	.172	.269

*Satterthwaite's degrees of freedom

Table 4 : scores of female participants on the CATCH scale

Group	Total Mean (SD)	Affect Mean (SD)	Behaviour Mean (SD)	Cognition Mean (SD)
Female student having a close relative / friend with disability	26.82 (2.50)	24.87 (3.21)	23.19(3.75)	29.97 (3.75)
Female student without a close relative / friend with disability	23.08 (1.63)	22.63(3.12)	20.21(4.25)	26.41 (3.00)
df	41.24*	56	56	56
T Statistic	6.57	2.69	2.84	4.02
P value	.000**	.0001**	.006**	.000**

Satterthwaite's degrees of freedom

**Statistically significant (<.05)

***Table 5 : Major findings about attitudes of students towards peers with disabilities**

1	Most students wouldn't mind if a child with disability sits next to them in class
2	Most students believe that children with the disability can do lots of things for themselves
3	More than half of the student believe that children with disability like to play and are interested in lots of things
4	More than two-thirds of the students would invite a disabled child to his/her birthday party
5	Few of the students would be scared being near someone who is disabled