

# Attitudes of Students towards Peers with Disability in an Inclusive School in Nigeria

Abiola Olaleye<sup>1\*</sup>, Olorunfemi Ogundele<sup>2</sup>, Samson Deji<sup>2</sup>, Oluseye Ajayi<sup>2</sup>,  
Omolara Olaleye<sup>3</sup>, Titilope Adeyanju<sup>2</sup>

1. School of Health Systems and Public Health, University of Pretoria, South Africa

2. Department of Community Health, Obafemi Awolowo University Teaching Hospitals Complex, Ile Ife, Nigeria

3. General Outpatient Department, Obafemi Awolowo University Teaching Hospitals Complex, Ile Ife, Nigeria

## 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.*

*This 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 at an inclusive secondary school located in a peri-urban area in South Western Nigeria.*

*Participants were recruited from a group of 118 students in the three junior classes and senior class one (JSS 1 to SSS 1). 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 students in the school were 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.*

---

\*Corresponding Author: Abiola O Olaleye, School of Health Systems and Public Health, University of Pretoria, South Africa.  
Tel: +27 78 767 3281 Email: kayordex05@yahoo.com

*Conclusions:* In this inclusive 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, inclusive school, Nigeria

## 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, 2005).

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 African 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). Okunrotifa (1988) reported that in Nigeria only 1.5% of those studying Physical Education and 21% of students pursuing Nursing Education were ready to accommodate children with disabilities in their classes.

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 Nigeria (Olofintoye, 2010). 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 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 Ile Ife, Osun State, Nigeria. This missionary school, with about three hundred students, is the only inclusive

school in the 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 students' attitudes towards peers with disabilities. Participants were selected from a group of 118 students in the three junior classes and senior class one (JSS1-3 and SSS1) 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 authors permission to go ahead. A total of 107 students agreed to participate.

A semi-structured self-administered 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 a similar study by Beck et al (2000). It has a high validity and reliability, and has been 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 affect, behaviour and cognition.

Data collection took place in the classrooms on 17th and 18th of October, 2011. Questionnaires were distributed to the students with the assistance of the class teachers, and it took 20 -25 minutes to fill them in.

Data were 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 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 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 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-tests 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 ages of 10 and 16 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**

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 teased	64.8	15.2	20.0
8	Handicapped children want lots 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 a handicapped child	21.9	14.3	63.8
11	I would talk to a handicapped child I didn'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 try 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' scores for the whole population**

Score	Mean	SD	Minimum	Maximum	Median	1st quartile	3rd 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

Students in this school had a positive attitude towards their peers with disability ( $M = 22.55$ ,  $SD = 3.79$ ). The mean score on cognition was the highest while the one on 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 a close friend/relative with disability had significantly higher total scores ( $M = 26.82$ ,  $SD = 2.50$ ) than their peers who did not ( $M = 23.08$ ,  $SD = 1.63$ ),  $t(41.24) = 6.57$ ,  $p = .000$ . However, male students who had a close friend/relative with disability had non-significant higher total scores ( $M = 20.39$ ,  $SD = 3.74$ ) than those who did not ( $M = 19.42$ ,  $SD = 2.95$ ),  $t(45) = .81$ ,  $p = .425$ . Differences in the scores

of male and female participants on affect, behaviour and cognition also followed a similar pattern (Tables 3 and 4).

**Table 3: Scores of male participants on the CATCH scale**

Group	Total Mean (SD)	Affect Mean (SD)	Behaviour Mean (SD)	Cognition Mean (SD)
Male students having a close relative/ friend with disability	20.39(3.74)	18.38(4.06)	17.52(1.77)	25.83(3.86)
Male students without a close relative/ friend with disability	19.42(2.95)	18.13(5.65)	16.22(4.27)	23.68(5.14)
df	45	45	26.73*	45
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 students having a close relative/ friend with disability	26.82 (2.50)	24.87 (3.21)	23.19 (3.60)	29.97 (3.75)
Female students 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**	.001**	.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 disability can do lots of things for themselves.
3.	More than half of the students 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.

## DISCUSSION

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

Attitudes towards students with disability were found to be positive in this population, as the mean score was more than half of the total score obtainable on the scale. However, this was lower than the scores 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 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 classmate. This item had the highest frequency in the agree column of the response table of the CATCH scale. Previous studies described the calculated scores; none reported the 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 the respondents were willing to accept a child with disability as a desk-mate.

In this study, girls generally had more positive attitudes towards students with disability. In keeping with the findings of previous studies, this showed the role of gender in defining peoples' attitudes (Krajewski & Hyde, 2000; Krajewski et al, 2002). Studies have shown that compared to women, men tend to have more negative attitudes towards people with disability (McConkey et al, 1983). The empathic and caring nature of girls could be the reason for this difference. Tirosh et al (1997) also demonstrated the effect of gender in their study. They showed that 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.

### **Limitations**

The socioeconomic status of the students in this environment were 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 social contacts makes a difference to attitudes of students in secondary schools in Nigeria 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 Nigeria.

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.

## REFERENCES

- Ajuwon PA (2008). Inclusive education for students with disabilities in Nigeria: Benefits, challenges and policy implications. *International Journal of Special Education*; 23(3): 1-16.
- Allport G (1954). *The nature of prejudice*. Cambridge(MA): Addison-Wesley.
- Beck AR, Fritz H, Keller A, Dennis M (2000). Attitudes of school-aged children towards their peers who use augmentative and alternative communication. *Augmentative and Alternative Communication*; 16: 13-26.
- Christensen C (1996). Disabled, handicapped or disordered: 'What's in a name?'. In: F. R. C Christensen, ed. *Disability and the dilemmas of education and justice*. Buckingham: Open University Press; 63-77.
- Eagly A, Chaiken S (1993). *The psychology of attitudes*. Fort Worth ( TX): Harcourt Brace Jovanovich.
- Feldman R (1993). *Understanding psychology*. 3rd ed. New York: McGraw-Hill.
- Gaad E (2004). Cross-cultural perspectives on the effect of cultural attitudes towards inclusion for children with intellectual disabilities. *International Journal of Inclusive Education*; 8(3): 311-328.
- Garuba A (2003). Inclusive education in the 21st century: challenges and opportunities for Nigeria. *Asia Pacific Disability Rehabilitation Journal*; 14(2): 191-200.
- Godeau E, Vignes C, Sentenac M, Ehlinger V, Navarro F, Grandjean H, Arnaud C (2010). Improving attitudes towards children with disabilities in a school context: a cluster randomised intervention study. *Developmental Medicine & Child Neurology*; October, 52(10): e236-242.
- Krajewski JJ, Hyde M, O'Keefe M (2002). Teen attitudes toward individuals with mental retardation from 1987 to 1998: Impact of respondent gender and school variables. *Education & Training in Mental Retardation & Developmental Disabilities*; 37: 27-39.
- Krajewski JJ, Hyde S H (2000). Comparison of teen attitudes toward individuals with mental retardation between 1987 and 1998: Has inclusion made a difference?. *Education and Training in Mental Retardation and Developmental Disabilities*; September, 35(3): 284-293.

- Lupua E, Cernatb C, Petrec C (2011). Identifying the attitude of healthy individuals towards disabled children – A chance to be educated for all. *Procedia - Social and Behavioural Sciences*; 29: 266–271.
- Manetti M, Schneider BH, Siperstein G (2001). Social acceptance of children with mental retardation: Testing the contact hypothesis with an Italian sample. *International Journal of Behavioural Development*; 25: 279–286.
- McConkey R, McCormack B, Naughton M (1983). A national survey of young people's perceptions of mental handicap. *Journal of Mental Deficiency Research*; 27(Pt 3): 171–83.
- Okunrotifa E (1988). Handicapped students and educational services: Students' attitudes and awareness. *Nigerian Journal of Counselling and Development*; 2: 34-39.
- Olofintoye T T (2010). Towards inclusion: the trends of psycho-social adjustment of students in Nigerian integrated junior secondary schools. *Procedia Social and Behavioural Sciences*; 5: 1146–1150.
- Pettigrew T, Tropp L (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*; 90: 751–783.
- Rimmerman A, Hozmi B, Duvdevany I (2000). Contact and attitudes toward individuals with disabilities among students tutoring children with developmental disabilities. *Journal of Intellectual and Developmental Disability*; 25(1): 13–18.
- Rosenberg M (1960). Cognitive reorganisation in response to hypnotic reversal of attitudinal affect. *Journal of Personality*; 28: 39-63.
- Rosenbaum PL, Armstrong RW, King SM (1986). Children's attitudes toward disabled peers: A self-report measure. *Journal of Paediatric Psychology*; 11(4): 517–530.
- Rosenbaum PL, Armstrong RW, King SM (1988). Determinants of children's attitudes towards disability: A review of evidence. *Care of Children's Health*; 17: 32-39.
- Rousso H (2003). *Education for All: A gender and disability*, New York: UNESCO.
- Tirosh E, Schanin M, Reiter S (1997). Children's attitudes towards peers with disabilities: the Israeli perspective. *Developmental Medicine & Child Neurology*; 39(12): 811-814.
- United Nations Children's Fund (2005). *The state of world's children 2006: Excluded and invisible*, New York: United Nations Children's Fund.
- Vignes C, Coley N, Grandiean H, Godeau E, Arnaud C (2008). Measuring children's attitudes towards peers with disabilities: A review of instruments. *Developmental Medicine & Child Neurology*; 50: 182–189.
- Wong DKP (2008). Do contacts make a difference? The effects of mainstreaming on student attitudes towards people with disabilities. *Research in Developmental Disabilities*; 29: 70–82.
- World Health Organisation (2001). *The international classification of functioning, disability and health*. Geneva, World Health Organisation.
- World Health Organisation (2010). *Community-based rehabilitation: CBR guidelines*, Geneva: World Health Organisation.
- World Health Organisation, 2011. *World report on disability*, Geneva: World Health Organisation.