

## **Attitudes of School Children Towards a Peer with an Intellectual Disability: A Comparison of Integrated and Segregated Cohorts**

**This study examined the effects of the full inclusion of children with intellectual disabilities in mainstream classrooms on children's attitudes towards peers with intellectual disabilities. The findings of the study suggest that contact may not be as important in improving children's attitudes towards intellectual disability as previously thought. The study also highlights the changing face of schools and society in relation to contact with peers with an intellectual disability.**

**VERONA McSTAY is an educational psychologist and works in the school age service with the Brothers of Charity Services in Roscommon. DR. SHEILA McGREE is a senior lecturer in social psychology at the Athlone Institute of Technology. DAWN HUNT is the principal psychologist with the Brothers of Charity Services in Roscommon.**

### **INTRODUCTION**

In recent decades, there has been a move away from educating children with intellectual disabilities in segregated settings towards more inclusive educational practices. Given this trend, the effects of inclusion has been the focus of much research, which has shown academic and social gains for students with intellectual disabilities when they are educated in inclusive settings (Sloper, Cunningham, Turner and Knessen, 1990; Baker, Wang and Walberg, 1994). A related body of research has focused on classmates' attitudes towards children with an intellectual disability (Townsend, Wilton and Vakilirad, 1993; Slininger, Sherrill and Jankowski, 2000). This research was conducted because the attitudes of classmates can be crucial to the success of the inclusion of the child with disabilities (Siperstein, Norins and Mohler, 2004; Nowicki, 2006).

Slininger et al. (2000) examined the effect of an experimental manipulation of contact where children were exposed to a child with an intellectual disability as part of their physical education class for a four week period. It was found that contact was associated with more positive attitudes, although the effect was significant for males only. Townsend et al. (1993) investigated the effect of locational integration on students' attitudes towards peers with an intellectual disability. Locational integration involves the inclusion of special classes in mainstream schools. Locational integration was found to be associated with more positive attitudes towards children with intellectual disabilities. Two Irish studies measured the effects of short-term social integration on female students' attitudes toward a hypothetical peer with an intellectual disability. Both found that contact through drama (Gash and Coffey, 1995) and other social activities (O'Toole, 2000) were related to positive attitudes.

One problem with existing studies is that they do not employ the types of inclusion practices currently in use today. Most previous research examined the effect of locational integration or short-term integration in social and/or recreational activities. Current inclusion practices have moved towards full inclusion in the mainstream class, possibly

bringing about similar or greater attitudinal gains than have been obtained in previous research. It could also be, however, that inclusion in the mainstream class may result in more negative attitudes as a result of experiencing difficulties when cooperating in an academic setting with a child with an intellectual disability.

Previous research has also examined gender differences in attitudes towards children with an intellectual disability. Some studies reported that girls have more positive attitudes towards children with disabilities (Townsend et al., 1993; Nabors and Keyes, 1995; Tripp, French and Sherrill, 1995), while other studies report more favourable attitudes amongst boys (Woodward, 1995; Nabuzoka and Ronning, 1997) or no gender differences (Colwell, 1998; Tamm and Prellwitz, 2001). Sippola, Bukowski and Noll (1997) have pointed out that many of these studies did not match the gender of the target child with that of the child responding to the survey. As children prefer to associate with their own gender, a true test of gender differences would require that target and respondent children be matched for gender.

The current study examined the effect of inclusion on primary school children's attitudes towards a hypothetical peer with an intellectual disability. A full inclusion setting was examined where inclusion of a child with a moderate intellectual disability was in place for at least four years prior to the study, and the child was a full member of the class. A vignette describing a hypothetical child with an intellectual disability was used as the target child in measuring respondents' attitudes. The gender of the child described in the vignette was matched to the gender of the respondent.

## **THE STUDY**

### **Design**

This was a quasi-experimental, naturalistic study taking advantage of the inclusion and segregation experience that already existed. Participants were all in 5<sup>th</sup> and 6<sup>th</sup> class in rural primary schools. To examine attitudes towards a peer with intellectual disability, a vignette describing a child with an intellectual disability was used. The vignette was drawn from criteria defining a moderate range of intellectual disability in the American Psychiatric Association classification system for diagnostic criteria, DMS IV. The criteria were translated into functional information at an accessible level for 5<sup>th</sup> and 6<sup>th</sup> class students. The description in the vignette was based on a strengths-needs model of intellectual disability (McConkey, 2002; Westwood, 2003). Five psychologists working in the area of intellectual disability in Ireland agreed that the hypothetical child in the vignette was a valid description of a child with a moderate intellectual disability. The participating children and the child described in the vignette (target child) were matched for gender. The dependent variables were scores on the Adjective Checklist (ACL) (Siperstein, 1980), the Shared Activity Questionnaire (SAQ) (Morgan, Biebrich, Walker and Schwerdtfeger, 1998) and a single item measuring children's attitudes toward a school placement.

### **Participants**

One hundred and eighteen children from 5<sup>th</sup> and 6<sup>th</sup> classes in eight rural primary schools in a midland county in Ireland participated. Fifty seven of the children had a classmate with a moderate range of intellectual disability (inclusion group). Twenty-three, twenty-

eight and six participant children were surveyed across three different schools resulting in a total sample of fifty-seven children. In each school, the classmate with an intellectual disability had been a member of the class for over four years. Of the segregated group, sixty-one students did not have a classmate with a moderate intellectual disability. The sixty-one children were distributed across five different schools in groups as follows - 25, 8, 16, 6 and 6.

The inclusion group consisted of thirty-one boys and twenty-six girls. The segregated group consisted of thirty-four boys and twenty-seven girls. Ages ranged from 10 years 1 month to 13 years (Table 1).

**Table 1: Age range and average ages of the children in the inclusion and segregation groups**

<b>Group</b>	<b>Mean</b>	<b>Median</b>	<b>Age Range</b>
<b>Inclusion</b>	11yrs 9mths	11yrs 9mths	10yrs 1mths – 13yrs
<b>Segregation</b>	11yrs 6mths	11yrs 7mths	10yrs 2mths – 12yrs 9mths

## **Measures**

### *The Adjective Checklist (ACL) (Siperstein, 1980)*

This instrument consisted of 34 adjectives (16 positive and 18 negative). Children are asked to circle as many or as few adjectives as they wish to describe an actual or hypothetical peer presented by label, photo, drawing vignette or videograph (Slininger et al., 2000). It was validated specifically to assess children's judgements (stereotypes) of the strengths and weaknesses of peers with disabilities and is listed in the Encyclopaedia of Measurement and Statistics (2006). Siperstein (1980) reports alpha reliability coefficients of .81 and .61 in two separate studies. It has been used in numerous published studies on children's attitudes (Manetti, Schneider and Siperstein, 1999) including a recent Irish study to measure children's attitudes towards psychological disorders (Swords, Hennessey and Heary, 2005).

### *Shared Activity Questionnaire (Morgan et al., 1998)*

The Shared Activity Questionnaire (SAQ) was used to assess the willingness of children to engage in certain activities with the target child (Laura/James). In completing the SAQ the participants are asked to indicate activities they would do with Laura/James. The participants are asked to choose 'No,' 'Maybe' or 'Yes' to reflect how they feel about doing an activity with the target child. Each item is scored 'yes' = 3, 'maybe' = 2 and 'no' = 1. Higher scores reflect a greater willingness to share in an activity. Morgan, Walker, Bieberich and Bell, (1996) report high internal consistency reliability; coefficient alpha was .95 for the SAQ total score. Highly concurrent correlations with the Activity Checklist are reported by Bell (1998).

## **Procedure**

Participating schools in the inclusion group were identified through the school age database of a local service provider. The schools from which the segregated group were drawn were approached because they did not feature on the database. All schools

approached agreed to take part, except one school in the segregated group that had a student with asperger’s syndrome in their 5<sup>th</sup>/6<sup>th</sup> class combination.

Consent from the parents of the participating children was obtained. The children were informed that the researcher was interested in investigating 11 and 12 year olds’ attitudes towards friendship and the behaviour of other children of the same age. On the day of the study, the children were also informed that they were not obliged to take part and could opt out if they wished. Consent was obtained from the parents of the children with an intellectual disability in the inclusion group.

The participating children were given a booklet consisting of the vignette describing a peer with an intellectual disability (the target child) and the four dependent measures; the ACL questionnaire; the single measure of school placement, asking the participants what school they thought would be best for the target child; the SAQ; and the manipulation check asking the participants whether they knew someone like the target child (Laura/James) and how often they saw them. The researcher was present in each class and conducted the study with the children. The questionnaire took about 30 minutes to complete.

## RESULTS

Differences between the inclusion and segregated groups were assessed using the Mann-Whitney U test, which is a non-parametric test used to examine differences between medians. A non-parametric test was used as the Kolmogorov-Sminov test of normality indicated that the distribution of scores for the dependant variables were not normal. Median scores were positive for both groups (Table 2). No significant differences were found between the children who had experienced inclusion in the classroom and those who had experienced segregation.

**Table 2: ACL and SAQ total median scores and standard deviations (SD) for the inclusion and segregated groups**

Group	n	<u>ACL</u>		<u>SAQ Totals</u>	
		Median	SD	Median	SD
<b>Inclusion</b>	57	26	4.53	58	11.77
<b>Segregated</b>	61	25	5.04	56	10.58

(A score of 20 or more on the ACL is considered positive. SAQ scores range from 24-72.)

Differences between attitudes towards school placement were not significant. The mean scores for the inclusion and segregated groups were between 2 and 3. This represented a desire to have the target child in the students’ school but not necessarily in their class.

The manipulation check asked participants if they knew someone like the target child (Laura/James) and asked them to choose “Not at all”, “A little” or “A lot” to say how often they see this child (Table 3). This indicated that 61% of students in the segregated group reported knowing a peer with an intellectual disability and 19% of students in the inclusion group reported not knowing a peer with an intellectual disability. Thus, it was decided to examine the data using self-report as one of the independent variables. However, examination of the data showed that differences between the most extreme levels of self-reported contact (those who reported “A lot” and those who reported “Not at all”) were not significant ( $z = -0.411$ ,  $p = 0.681$ ; ns).

**Table 3: The median and SDs for the ACL and SAQ totals for the most extreme levels of self-reported contact**

Group	n	<u>ACL</u>		<u>SAQ Totals</u>	
		Median	SD	Median	SD
Yes, I know someone like Laura/James and I see them a lot.	44	26	5.07	57	9.01
No, I do not know someone like Laura/James and I see them not at all.	35	26	3.81	56	12.37

Assessment of differences between boys and girls, irrespective of classroom experience, indicated that girls were significantly more willing than boys to share recreational, academic and social activities with a peer with an intellectual disability (Table 4) (SAQ total,  $z = -2.805$ ,  $p = 0.05$ ; SAQ Recreational,  $z = -2.061$ ,  $p < 0.05$ ; SAQ Academic,  $z = -2.104$ ,  $p < 0.05$  and for SAQ Social,  $z = -3.430$ ;  $p = 0.01$ ). However, the experience of inclusion and segregation in the classroom did not affect girls and boys differently (for girls (ACL):  $z = -1.224$ ,  $p = 0.221$ ; ns; SAQ total  $z = -0.205$ ,  $p = 0.838$ ; ns) (for boys (ACL):  $z = -1.529$ ,  $p = 0.126$ ; ns; SAQ total  $z = 0.000$ ,  $p = 1.000$ ; ns).

**Table 4: SAQ total, Recreational, Academic and Social median scores and SDs for girls and boys, irrespective of classroom experience**

Group	n	<u>SAQ Total</u>		<u>SAQ Rec</u>		<u>SAQ Acad</u>		<u>SAQ Soc</u>	
		Median	SD	Median	SD	Median	SD	Median	SD
Girls	53	60	9.15	19	3.16	19	3.58	21	4.92
Boys	65	56	11.95	19	3.99	18	3.75	20	5.91

## DISCUSSION

This study set out to investigate the effect of having a classmate with a moderate range of intellectual disability. It compared the attitudes, towards a hypothetical peer with an intellectual disability, of 5<sup>th</sup> and 6<sup>th</sup> class children who had experienced full inclusion with children who had not. It also compared children's attitudes towards the school placement of that peer. Gender differences in attitude were also examined.

Results indicated that the attitudes of children who had experienced full inclusion, i.e. had a classmate with a moderate range of intellectual disability for at least four years, and those that had not, were very similar. It is not possible to conclude that the experience of full inclusion had an adverse effect on children's attitudes. The attitudes of children, regardless of experience, were relatively positive overall with mean scores above the mid point on both the ACL and SAQ. Results did not indicate a significant difference in attitudes towards the type of school placement for a child with a moderate range of intellectual disability. Both groups favoured a placement in their school but not necessarily in their class. This contrasts with the findings of McConkey, McCormack and Naughton (1983) who reported, in an Irish study, that less than 25% of the children surveyed nationally felt that children with intellectual disabilities should be allowed to attend ordinary schools.

Sixty-one per cent of children who did not have a classmate with an intellectual disability indicated, in a manipulation check, that they knew someone with an intellectual disability. Again, this contrasts sharply with McConkey et al. (1983) who reported that only 25% of the children they surveyed indicated they had the experience of interacting with an individual with intellectual disabilities.

The high percentage of children in the segregated group who reported knowing an individual with an intellectual disability warranted an examination of self-reported levels of contact. However, a comparison between the two most extreme levels of contact, i.e. children who reported knowing an individual with an intellectual disability and seeing them a lot, and children who reported not knowing an individual with an intellectual disability, did not indicate differences in attitudes. This would suggest that contact with peers with intellectual disabilities may not be as important in improving children's attitudes towards intellectual disability as was once thought (Townsend et al., 1993; Gash and Coffey, 1995; O'Toole, 2000; Slininger et al., 2000). A number of factors emerging in recent years may have had a greater impact on children's attitudes than classroom and self-reported contact. These include, the introduction of social, personal and health education in Irish schools with an emphasis on inclusion, disability awareness programmes such as the one offered to primary schools during the Special Olympics in 2003, positive media presentation of disability and visible community inclusion.

Surprisingly, 19% of children who had a classmate with an intellectual disability in the moderate range for at least four years reported not knowing an individual with an intellectual disability. The experience of full inclusion for over four years may have resulted in the perception of more similarities than differences for some children. Children may view their classmate with an intellectual disability as just that, i.e. a

classmate. The effect of full inclusion may result in familiarity and acceptance for some children. Future research employing focus groups might explore this suggestion further.

Examination of gender differences indicated that girls and boys, regardless of experience, held similar stereotypical attitudes towards school placement. However, girls were more willing than boys to partake in activities with a peer with an intellectual disability. Willingness to join in activities with a peer with an intellectual disability is the functional component of attitudes, i.e. actions speak louder than words. This would imply that teachers using cooperative learning structures, which have been used successfully to improve peer relationships with children with intellectual disabilities (Siperstein et al., 2004), should use more girls than boys in the initial learning groups to establish good patterns of interaction. Once patterns have been established, more boys could be entered into the groups. The effect of full inclusion did not yield differences in attitudes between boys and girls.

## CONCLUSION

This study demonstrated that children hold positive attitudes towards peers with intellectual disabilities and that these attitudes are not adversely affected by long-term contact. The participating children were drawn from rural communities who may be more accepting of peers with intellectual disability. Further research is needed to establish whether the positive attitudes reported in this county exist in other rural and urban settings and to investigate the effects of the strengths-needs model of disability favoured in this study. If a strengths-needs model has a more positive effect on children's attitudes than a deficit model then the former should be employed to support inclusive education in schools and in disability awareness education programmes.

## REFERENCES

- Baker, E., Wang, M. and Walberg, H. (1994) The Effects of Inclusion on Learning, *Educational Leadership*, Vol. 52 (4), pp. 33-35.
- Bell, S. (1998) Children's Attitudes and Behavioural Intentions Toward a Peer Presented as Obese: Does a Medical Explanation for Obesity Make a Difference? *Journal of Paediatric Psychology*, Vol. 25 (3), pp. 137-145.
- Colwell, C. (1998) Effects of Information on Elementary Band Students' Attitudes Toward Individuals With Special Needs, *Journal of Music Therapy*, Vol. 35, pp.19-33.
- Gash, H. and Coffey, D. (1995) Influences on Attitudes Toward Children with Mental Handicap, *European Journal of Special Needs*, Vol. 10 (1), pp. 1-16.
- Manetti, M., Schneider, B. and Siperstein, G. (1999) *Studies Employing the Adjective Checklist (ACL)*, Boston: Center for Development & Education, University of Massachusetts.

- McConkey, R., McCormack, B. and Naughton, M. (1983) A National Survey of Young People's Perceptions of Mental Handicap, *Journal of Mental Deficiency Research*, Vol. 27, pp. 171-183.
- McConkey, R. (2002) Reciprocal Working by Education, Health and Social Services: Lessons for a Less-travelled Road, *British Journal of Special Education*, Vol. 29 (1), pp. 3-8.
- Morgan, S., Biebrich, A., Walker, M. and Schwerdtfeger, M. (1998) Children's Willingness to Share Activities with a Physically Handicapped Peer: Am I More Willing Than my Classmates? *Journal of Paediatric Psychiatry*, Vol. 23 (6), pp. 367-375.
- Morgan, S., Walker, M., Bieberich, A. and Bell, S. (1996) *The Shared Activity Questionnaire*, (unpublished manuscript), Tennessee: University of Memphis.
- Nabors, L. and Keyes, L. (1995) Preschoolers' Reasons for accepting Peers With and Without Disabilities, *Journal of Developmental and Physical Disabilities*, Vol. 7, pp. 335-55.
- Nabuzoka, D. and Ronning, J. (1997) Social Acceptance of Children with Intellectual Disabilities in an Integrated School Setting in Zambia: a Pilot Study, *International Journal of Disability, Development and Education*, Vol. 44, pp. 105-115.
- Nowicki, E. (2006). A Cross-sectional Multivariate Analysis of Children's Attitudes Towards Disabilities, *Journal of Intellectual Disability Research*, Vol. 50, pp. 335-348.
- O'Toole, C. (2000) Experiencing Special Needs in Mainstream Schools: A Parent's Perspective, *Frontline*, July, pp. 12-14.
- Siperstein, G. (1980) *Instruments for Measuring Children's Attitudes Toward the Handicapped*, (unpublished manuscript), Boston: University of Massachusetts.
- Siperstein, G., Norins, J. and Mohler, A. (2004) 'Social Acceptance and Attitude Change: Fifty Years of Research'. In W. Jacobson, A. Mulick and J. Rojahn (eds) *Handbook of Intellectual Disabilities*, New York: Springer.
- Sippola, L., Bukowski, W. and Noll, R. (1997) Dimensions of Liking and Disliking Underlying Same-sex Preferences in Childhood, *Merrill-Palmer Quarterly*, Vol. 43, pp. 591-609.
- Slininger, D., Sherrill, C. and Jankowski, C. (2000) Children's attitudes Toward Peers with Severe Disabilities: Revisiting Contact Theory, *Adapted Physical Activity Quarterly*, Vol. 17, pp. 176-196.

Sloper, P., Cunningham, C., Turner, S. and Knessen, C. (1990) Factors Relating to the Academic Attainment of Children with Down Syndrome, *British Journal of Educational Psychology*, Vol. 60, pp. 284-298.

Swords, L., Hennessey, L. and Heary, C. (2005) Children's Attitudes Towards Psychological Disorders: A Developmental Analysis of Attitudes, Paper Presented at the Psychological Society of Ireland Annual Conference, City of Derry, November 17<sup>th</sup> to 20<sup>th</sup> 2005.

Tamm, M. and Prellwitz, M. (2001) 'If I had a Friend in a Wheelchair': Children's Thoughts on Disability, *Child: Care, Health and Development*, Vol. 27, pp. 223-40.

Townsend, M., Wilton, K. and Vakilirad, T. (1993) Children's Attitudes Toward Peers with Intellectual Disability, *Journal of Intellectual Disability Research*, Vol. 37, pp. 405-411.

Tripp, A., French, A. and Sherrill, C. (1995) Contact Theory and Attitudes of Children in Physical Education Programs Toward Peers with Disabilities, *Applied Physical Activity Quarterly*, Vol. 12, pp. 323-332.

Westwood, P. (2003) *Common Sense Methods for Children with Special Educational Needs* (4th ed), London: Routledge.

Woodward, R. (1995) The Effects of Gender and Type of Disability on Attitudes of Children Toward Peers with Physical Disabilities, *Therapeutic Recreation Journal*, Vol. 29, pp. 219-227.