An Investigation into Using a Social Skills Group to Improve the Social Communication Skills of Students with Autistic Spectrum Disorders (ASD) in a Mainstream Post-Primary School in Ireland

The aim of this study was to investigate how a social skills group could be used to improve the social communication skills of students with Autistic Spectrum Disorders (ASD) in a mainstream post-primary school in Ireland. In the literature, the need for social skills training was clearly defined and a particular focus was placed on the use of social skills groups. A social skills group could be incorporated into a school environment and it could potentially have a valuable part to play in a social skills training programme for any post-primary student with ASD. The researcher implemented action research in a mainstream post-primary school. The intervention involved making observations of the students' social skills across a number of settings. The findings from the research study indicate improvements in the social skills of the target students with ASD.

Keywords: autism, autistic spectrum, inclusion, social skills training

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INTRODUCTION/LITERATURE REVIEW

Autistic Spectrum Disorders (ASD) include a range of conditions that are characterised by restricted social communication and social interaction and restrictive, repetitive behaviours, interests and activities (American Psychiatric Association, 2013) and autism is the most widely recognised condition that is within the Spectrum (Mesibov and Howley, 2003). Social skills impairments are,

in most cases, a significant consequence of the delayed language and behavioural development of children with ASD. This can result in a failure to build peer relationships formed through making and sustaining connections of shared meaningful social interactions with peers (Prenderville, Prelock and Unwin, 2006). These social difficulties experienced by students with ASD are the most defining feature and potentially the most disabling (Jones, 2002; Wing, 2007). Social deficits distinguish students with ASD from other students with developmental disorders (Klin, Saulnier, Sparrow, Cicchetti, Volkmar and Lord, 2007; Reichow & Volkmar, 2010). Difficulties in social interactions typically remain the largest area of vulnerability, even for the most intellectually able students with ASD (Howlin and Rutter, 1999). The most recognised aspect of the ASD diagnosis is the difficulties in reciprocal interaction and the ability to form relationships (Laugeson, Ellingson, Sanderson, Tucci and Bates, 2014; Department of Education and Science, 2001; Department of Education Science Inspectorate, 2006).

The steps taken towards the inclusion of students with ASD are part of a change in policy over a period of time (DES, 1993, 2001; Government of Ireland, 1998, 2004). One definition of inclusion is that it is a process of:

- addressing and responding to the diversity of needs of learners through enabling participation in learning, cultures, and communities, and
- removing barriers to education through the accommodation and provision
 of appropriate structures and arrangements, to enable each learner to
 achieve the maximum benefit from his/her attendance at school (Winter
 and O'Raw, 2010 p. 39).

This definition offers a guiding ideal that enables students to participate fully and reach their potential in an educational system. The current educational provision for students with ASD has evolved and is now deemed to be an ASD-specific provision that seeks to cater for all aspects of students' education while enabling them to achieve their potential (Daly et al., 2016). The right to equal access in education is now recognised (Daly et al., 2016). The current DES circulars provide the opportunity for students with ASD to receive extra support while attending a mainstream school (DES, 2005a, 2005b; National Educational Psychological Service, 2010). This extra support is to facilitate the learning needs of students with ASD as they attend mainstream classes and receive curricular input with their peers (DES, 1999, 2002, 2003, 2004, 2005a, 2005b; DESI, 2006; Parsons et al., 2009).

The developmental profile for a student with ASD has a social skills deficit and this has implications for the students when they are attending mainstream school.

The social learning environment that is apparent in the Irish education system highlights the importance of others in assisting the inclusion of students with ASD. Peers, teachers, resource teachers and SNA staff all have an important role to play (DES, 2001; DiSalvo and Oswald, 2002; Jones, 2002; Baker, 2003; Tse, Strulovitch, Tagalakis, Meng and Fombonne, 2007; Reichow and Volkmar, 2010; Laugeson, 2014).

Recent literature has defined the role of social skills training in supporting the participation of students with ASD in the classroom and the wider school environment. Social skills training can be incorporated into a school environment by the use of social skills groups (Laugeson 2014). A social skills group allows for a variety of teaching strategies to be used where students experience social interactions with others of the same age (Jones, 2002; Baker, 2003; Reichow & Volkmar, 2010). The students with ASD can participate in group activities with their peers in a structured small group setting. There are many opportunities for teachers to address the individual social skills deficits of the students involved through incidental learning opportunities. A social skills group is a useful tool when incorporated into a targeted social skills educational plan (Laugeson, 2014, DES, 2001; Baker, 2003; Beaumont & Sofronoff, 2008; Solomon, Goodlin-Jones & Anders, 2004; Tse et al., 2007).

The majority of research studies have found that students with ASD have benefited from participating in a social skills group and recorded improvements in social skills for the students with ASD involved (Webb, Miller, Pierce, Strawser and Jones, 2004; Mackay, Knot and Dunlop, 2007; Tse et al., 2007; Reichow and Volkmar, 2010; Laugeson et al., 2014). In many of the studies, there were other unforeseen benefits recorded where the students with ASD made friends and had a feeling of acceptance within the group (Barnhill, Cook, Tapscott, Kelly and Brenda, 2002; Solomon et al., 2004; Bauminger, 2007; Tse et al., 2007; Herbrecht et al., 2009). Participation in the group acted as a platform to encourage students with ASD to form friendships and experience feelings of self-acceptance within a group. This reduction in social isolation is, in itself, a desirable aim of any social skills intervention and further validates this tool as a useful intervention for a post-primary school.

METHODS AND RESULTS

The initial steps involved a period of consultation with parents, students and staff, where the aim of the study was outlined and signed permission was sought which

complied with the standards of ethical research. The three students selected for the focus of this intervention were enrolled in a special class for students with ASD in a mainstream post primary school. A series of assessment tools were used to establish a baseline for intervention. This stage of the study involved assessing the social skills of the target students for the intervention. During the assessment process, the individual student's parents and a small group of teachers were asked to fill in an observation profile (Cummine, Dunlop and Stevenson, 2010). As part of the assessment process, the target behaviours were counted across three settings on one specific day and parents and SNA staff were involved in this event recording (Alberto and Troutman, 2009). Data was also gathered from interviews held with individual students, their parents and a small number of teachers who worked with the students involved in the study.

Following the assessment process, the social needs of the students were identified and the common needs were selected to be the focus of this intervention as outlined in Table 1.

Table 1 Social Skills Needs of the Target Students with ASD

Common Social Skills Learning Need	Learning Targets
Making a greeting	The students will be able to say "hello" appropriately in response to a greeting.
Introducing themselves to a group	The students will introduce themselves individually to the group.
Politely interrupting a conversation	The students will identify how and when to interrupt.
Staying on Topic	Students will identify how to stay on topic.
	Students will practice staying on topic.
Maintaining a conversation	Students will identify good examples of how to maintain a conversation.
	Students will practice how to maintain a conversation.
Taking turns in conversations	Students will identify good turn taking and bad turn taking in conversations.
	Students will practice good turn taking in conversations.

The researcher aimed to implement a programme to teach social skills to a group of students with ASD in the safe environment of a social skills group in the special class setting. Based on the recommendations from the literature and based on the identified needs of the students, a format for a social skills training programme was developed. The following key points were used as a guide as shown in Table 2.

Table 2 Recommendations for the running of a social skills group

Recommendation	Source
Design a programme for 10-12 sessions	Mesibov (1984); Webb et al. (2004); Cotugno (2009)
Use a structure to organise and outline each session	Mackay et al. (2007); Tse et al. (2007) Laugeson et al. (2014)
Build in rewards for good behaviour	Koenig, Cicchetti, Scahill and Klin (2009); Solomon et al. (2004)
Include peers	Baker (2003); Laugeson et al. (2014)
Target the social needs of the students involved	Baker (2003); Rao, Beidel and Murray (2008)
Use a range of teaching methods	Attwood (2007); Baker (2003); Solomon et al. (2004); Beaumont and Sofronoff (2008); Mackay et al. (2007)
Set homework tasks to include parents	Rose and Anketell (2009)
Set a positive atmosphere	Koenig et al. (2009); Solomon et al. (2004)
End the session with an activity	Mackay et al. (2007) Ozonoff and Miller (1995); Herbrecht et al. (2009); Cotugno (2009)
Give opportunities for the students to use the learnt skills outside of the group to enhance generalisation	Herbrecht et al. (2009); Dotson, Leaf, Sheldon and Sherman (2010)

This intervention was run for six weeks with a total of ten sessions. The intervention combined a number of teaching methods, role play, social stories, modelling by staff and peers, visual supports (based on the TEACCH approach), reinforcements for good behaviour through party themes and trips and group instruction. The other students selected to participate were asked to apply to join the group and were

interviewed by teaching staff who were involved. Data was gathered each week by reflective diary, feedback from a critical friend, observation and interviews. This was carefully read and coded to achieve a record of recurring patterns and important breakthroughs.

The baseline revealed that the students had few greetings or initiations during their day across the settings included in the assessment process. Post-intervention results indicated that they had increased their greetings to peers during mainstream class, during resource class, during the lunch break and at home. The results were combined and are displayed in Figure 1.

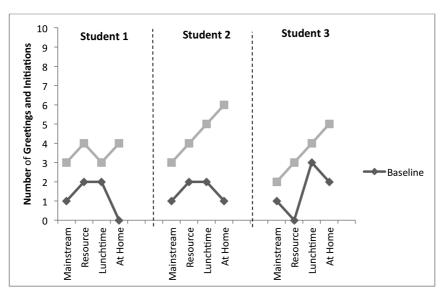


Figure 1: Social greetings and initiation

The post-intervention assessments show a reduction in inappropriate interrupting by the student 1 with ASD (Figure 2), while the other two students with ASD show a marginal increase in effective interrupting.

To further investigate the generalisation of this skill, as part of the post-assessment process, the amount of interruptions made by student 1 with ASD were counted across three settings on one specific day and parents and SNA staff were involved in this event recording. The chart shows a reduction in interrupting across three settings and there is clear evidence that this skill was generalised by this student (Figure 2).

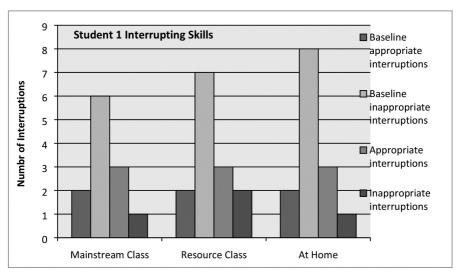


Figure 2: Interruptions made by Student 1 across three settings on one day

The student's ability to turn take was also confirmed in the post-assessment feedback from the mainstream teachers involved and by the observations made by the SNA staff. The use of the activities and games were a very effective strategy to teach this skill of turn taking. The students with ASD and their typical peers reported that they enjoyed the activity and there was a very positive atmosphere during these sessions. The final two key areas targeted in this intervention were the social skills of maintaining a conversation and staying on topic in conversations. The post-intervention assessments showed that each student only made slight improvements in these two areas and the results are not significant enough to be included in this paper.

During pre- and post-intervention interviews, it was noted that the peer group experienced a change in views and appeared to recognise that students with ASD also have opinions and interests that should be considered in a class discussion. Another change noted in the data collected during the interviews was that the students with ASD felt part of the group and were seen to interact more comfortably within the group, which reflects findings by Herbrecht et al., (2009); Tse et al., (2007) and Barnhill et al., (2002). Similar to Barnhill et al., (2002) and Chamberlain et al., (2007), some initial signs of friendships were observed during lunch time in the post-assessment process. Overall, the social skills group allowed

the students with ASD opportunities to get to know their peers and to reduce the social isolation that they had previously experienced, which is also noted by Tse et al., (2007). The use of team activities as part of the social skills group allowed the students with ASD more opportunities to have fun with their peers. Student 1 with ASD stated that he had never tried some of the activities before and that he really wanted to do them again. Feedback gathered from parents also confirmed the positive effects for the students, as the parents reported that the students would initiate conversations at home discussing the activities in the social skills group.

DISCUSSION AND CONCLUSIONS

There were recorded improvements in the social-communication skills of the target students with ASD where some generalisation of the taught skills was observed. This is in agreement with findings in the research studies as discussed in the literature review (Webb et al., 2004; Mackay et al., 2007; Tse et al., 2007; Laugeson et al., 2009; Dotson et al., 2010; White, Koenig and Scahill, 2010). During the student interviews and the teacher observations noted, it was recorded that students with ASD experienced a feeling of self-acceptance within the group which is also seen in the results of other studies (Tse et al., 2007, Barnhill et al., 2002 and Herbrecht et al., 2009).

There were also teacher observations which noted that the students with ASD seemed to sit more comfortably within the group with less autistic related behaviours, which is in agreement with the findings of Herbrecht et al., (2009). Overall the social skills groups were helpful for the participants where there were improvements in social communication and initiating contact with peers observed at lunchtime in school, similar to the findings of Barnhill et al., (2002). There were still areas of the skills taught that needed a follow up session or booster session, such as the skills of staying on topic and maintaining a conversation as suggested by White et al., (2010).

The use of this social skills group recognises that structures need to be put in place to facilitate inclusion of students with ASD in a mainstream school setting. To return to our original definition of inclusion, as defined by Winter and O'Raw (2010), this social skills group started a process of addressing and responding to the diversity of needs of the students with ASD through enabling participation in a community and it removed barriers for them through the accommodation and provision of appropriate structures and arrangements, to enable each student with ASD to achieve the maximum benefit from their attendance at school. This

intervention is addressing a social need for the students with ASD and is part of a whole school approach, as described in Moorewood et al., (2011).

It enabled the researcher to add flexibility to the organisation of teaching and curriculum provision and it facilitated the inclusion of the students within their peer group in the school community (Ware et al., 2009). The experience of participating in a social skills group had a beneficial impact on the target students. The students were given appropriate opportunities for meaningful interactions with their peers, as recommended in The Report of the Task Force on Autism (DES, 2001). In agreement with Barnhill et al.. (2002), during the intervention, the students with ASD made friends within the group and they were observed to greet and chat to these friends outside of the social skills group.

This intervention played an important role in establishing a framework for the inclusion of students with ASD within the school environment. There are some observed improvements in the social communication skills for the target students with ASD, however limited generalisation of some of the social skills was recorded. One student with ASD experienced other benefits by participating in the social skills group, namely peer acceptance, participation in activities and a reduction in social isolation. This reduction of social isolation is it itself a desirable aim of any social skills intervention. This provides the researcher with the interest and motivation to continue with this intervention after this study has finished, where it is hoped that further benefits will be experienced by all involved.

REFERENCES

- American Psychiatric Association (2013) *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.), Washington, DC: Author.
- Alberto, P. and Troutman A. (2009) *Applied Behavioural Analysis for Teachers* (8th ed.), London: Pearson Education Ltd.
- Attwood, T. (2007) *The Complete Guide to Asperger's Syndrome*, London: Jessica Kingsley.
- Baker, J. (2003) Social Skills Training for Children and Adolescents with Asperger Syndrome and Social-Communication Problems, Shawnee Mission, KS: Autism Asperger Publishing Company.
- Barnhill, G. P., Cook, K. Tapscott, T., Kelly, M. and Brenda S. (2002) The Effectiveness of Social Skills Intervention Targeting Nonverbal Communication

- for Adolescents with Asperger Syndrome and Related Pervasive Developmental Delays, *Focus on Autism and Other Developmental Disabilities*, Vol. 17 (2), pp. 112-118.
- Bauminger, N. (2007) Brief Report: Group Social-Multimodal Intervention for High Functioning ASD, *Journal of Autism and Developmental Disorders*, Vol. 37 (8), pp. 1605-1615.
- Beaumont, R. and Sofronoff, K. (2008) A Multi-Component Social Skills Intervention for Children with Asperger Syndrome: The Junior Detective Training Program, *The Journal of Child Psychology and Psychiatry*, Vol. 49, pp. 743–753.
- Cotugno, A.J. (2009) Social Competence and Social Skills Training and Intervention for Children with Autism Spectrum Disorders, *Journal of Autism Development Disorders*, Vol.39 pp. 1268-1277.
- Daly, P., Ring, E., Egan, M., Fitzgerald, J., Griffin, C., Long, S., McCarthy, E.,
 Moloney, M., O'Brien, T., O'Byrne, A., O'Sullivan, S., Ryan, M. and Wall,
 E. (2016) An Evaluation of Education Provision for Students with Autism Spectrum Disorder in Ireland, Trim: National Council for Special Education.
- Department of Education and Science (1993) *Report of the Special Education Review Committee*, Dublin: The Stationery Office.
- Department of Education and Science (1999) *Circular 08/99 Applications for Full- Time or Part-Time Resource Teacher Support to Address the Special Education Needs of Children with Disabilities*, Dublin: The Stationery Office.
- Department of Education and Science (2001) *Educational Provision and Support* for Persons with Autistic Spectrum Disorders: the Report of the Task Force on Autism, Dublin: The Stationery Office.
- Department of Education and Science (2003) Circular SP ED 22/03 Allocation of Resources for Pupils with Special Needs in Primary Schools, Dublin: The Stationery Office.
- Department of Education and Science (2004) Circular 06/04 Appointment of Teachers to Cater for Students with Special Educational Needs, Dublin: The Stationery Office.
- Department of Education and Science (2005a) *Circular SP ED 01/05 the National Council for Special Education (NCSE)*, Dublin: The Stationery Office.

- Department of Education and Science (2005b) *Circular SP ED 02/05 Organisation* of Teaching Resources for Pupils who Need Additional Support in Mainstream Primary Schools, Dublin: The Stationery Office.
- Department of Education and Science Inspectorate (DESI) (2006) *The Evaluation of the Educational Provision for Children with Autistic Spectrum Disorders*, Dublin: The Stationery Office.
- DiSalvo, D. A., and Oswald, D. P. (2002) Peer-mediated Interventions to Increase the Social Interaction of Children with Autism: Consideration of Peer Expectancies, *Focus on Autism and Other Developmental Disabilities*, Vol. 17(4), pp.198–208.
- Dotson, W.H., Leaf, J.B., Sheldon, J.B. and Sherman, J.A. (2010) Group Teaching of Conversational Skills to Adolescents on the Autism Spectrum, *Research in Autism Spectrum Disorders*, Vol. 4 (2), p.199-209.
- Government of Ireland (1998) Education Act, Dublin: The Stationery Office.
- Government of Ireland (2004) *Education for Persons with Special Educational* Needs Act, Dublin: The Stationery Office.
- Herbrecht, E, Poustka, F, Birnkammer, S, Duketis, E, Schlitt, S, Schmotzer, G, and Bolte, S. (2009) Pilot Evaluation of The Frankfurt Social Skills Training for Children and Adolescents with Autism Spectrum Disorder, *European Child & Adolescent Psychiatry*, Vol. 18 (6), pp. 327-335.
- Howlin, P., and Rutter, M., (1999) Treatment of Autistic Children. London: Wiley.
- Jones G. (2002) Educational Provision for Children with Autism and Asperger Syndrome: Meeting their Needs, London: David Fulton Publications
- Klin, A, Saulnier, C, Sparrow, S, Cicchetti, D, Volkmar, F, and Lord, C., (2007) Social and Communication Abilities and Disabilities in Higher Functioning Individuals with Autism Spectrum Disorders: The Vineland and the ADOS, *Journal of Autism & Developmental Disorders*, Vol. 37(4), pp. 748-759.
- Koenig, K, A, Cicchetti, D, Scahill, L, and Klin, A (2009) Group Intervention to Promote Social Skills in School-Age Children with Pervasive Developmental Disorders: Reconsidering Efficacy, *Journal of Autism & Developmental Disorders* 39(8), pp. 1163-1172.
- Laugeson, E. A. (2014) The PEERS Curriculum for School-Based Professionals:

- Social Skills Training for Adolescents with Autism Spectrum Disorder, New York: Routledge.
- Laugeson, E., Ellingsen R., Sanderson, J., Tucci, L., and Bates, S. (2014) The ABC's of Teaching Social Skills to Adolescents with Autism Spectrum Disorder in the Classroom: The UCLA PEERS Program, *Journal of Autism* and Developmental Disorders, Vol. 44, 2244–2256.
- MacKay, T, Knott, F, and Dunlop, A (2007) Developing Social Interaction and Understanding in Individuals with Autism Spectrum Disorder: A Groupwork Intervention, *Journal of Intellectual & Developmental Disability*. Vol. 32 (4) pp. 279-290.
- Mesibov, G. (1984) Social Skills Training with Verbal Autistic Teenagers and Adults: A Programming Model, *Journal of Autism Development Disorders*, Vol. 14, pp. 395-404.
- Mesibov, G. and Howley, M. (2003) Accessing the Curriculum for Pupils with Autism Spectrum Disorders: Using the TEACCH Programme to Help Inclusion, London: Fulton.
- National Educational Psychological Service (NEPS) (2010) A Continuum of Support for Post-Primary Schools: Resource Pack for Teachers, Dublin: Author.
- Ozonoff, S, & Miller, J (1995) Teaching Theory of Mind: A New Approach to Social Skills Training for Individuals with Autism, *Journal of Autism and Developmental Disorders*, Vol. 25(4) pp. 415-433.
- Parsons, S., Guldberg, K., MacLeod, A., Jones, G., Prunty, A., and Balfe, T., (2009) International Review of the Literature of Evidence of Best Practice Provision in the Education of Persons with Autistic Spectrum Disorder, Trim: National Council for Special Education.
- Prenderville, J., Prelock, P.A. and Unwin, G. (2006) *Peer Play Interventions to Support the Social Competence of Children with Autism Spectrum Disorders*, Vermony & Ohio: University of Vermont and University of Ohio.
- Rao, P, Beidel, D, and Murray, M. (2008) Social Skills Interventions for Children with Asperger's Syndrome or High-Functioning Autism: A Review and Recommendations, *Journal of Autism & Developmental Disorders*, Vol. 38 (2), pp. 353-361.

- Reichow, B., & Volkmar, F. R. (2010) Social Skills Interventions for Individuals with Autism: Evaluation for Evidence-Based Practices within a Best Evidence Synthesis Framework, *Journal of Autism and Developmental Disorders*, Vol. 40, pp.149–166.
- Rose, R. and Anketell, C. (2009) The Benefits of Social Skills Groups for Young People with Autism Spectrum Disorder: A Pilot Study, *Child Care in Practice*, *15*(2), pp. 127-144.
- Solomon, M, Goodlin-Jones, B., and Anders, T. (2004) A Social Adjustment Enhancement Intervention for High Functioning Autism, Asperger's Syndrome, and Pervasive Development Disorder NOS, *Journal of Autism & Developmental Disorders*, Vol. 34 (6), pp. 649-668.
- Tse, J, Strulovitch, J, Tagalakis, V, Meng, L, and Fombonne, E. (2007) Social Skills Training for Adolescents with Asperger Syndrome and High-Functioning Autism, *Journal of Autism & Developmental Disorders*, Vol. 37 (10), pp. 1960-1968.
- Ware, J., Balfe, T., Butler, C., Day, T., Dupont, M., Harten, C., Farrell, A., McDaid, R., O'Riordan, M., Prunty, A. and Travers, J. (2009) Research Report on the Role of Special Schools and Classes in Ireland, Trim: National Council for Special Education.
- Webb, B, Miller, S, Pierce, T, Strawser, S, & Jones, W. (2004) Effects of Social Skill Instruction for High-Functioning Adolescents with Autism Spectrum Disorders, *Focus on Autism & Other Developmental Disabilities*, Vol. 19 (1), pp. 53-62.
- White, S. W., Koenig, K. and Scahill, L. (2010) Group Social Skills Instruction for Adolescents With High-Functioning Autism Spectrum Disorders, *Focus on Autism and Other Developmental Disabilities*, Vol. 25, pp. 209-219.
- Wing, L. (2007) Children with Autistic Spectrum Disorders. In Cigman, R. (Ed.) *Included or Excluded? The Challenge of Mainstream for Some SEN Children*, London: Routledge, pp. 23–33.
- Winter, E., and O' Raw, P. (2010) *Literature Review of the Principles and Practices Relating to Inclusive Education for Children with Special Educational Needs*, Trim: National Council for Special Education.

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