An evaluation of a short training course on autism for preschool personnel

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Summary

A 10-hour training course on autism was devised and evaluated with a self-selected group of 62 preschool personnel from a range of facilities. It aimed to enhance participant’s knowledge about autism and of the intervention strategies that are effective in assisting young children with this condition to communicate and interact with others as well as structuring their learning through play and more formal tasks.

The course was well received by the participants who three months later had implemented much of the advice given on the course. Course participants appeared more willing to enroll children with autistic spectrum disorders in their groups although a minority did express some reservations.

A resource pack for tutors has been prepared so that similar courses can be delivered elsewhere in the future. Issues relating to the provision of in-service training courses for preschool personnel are discussed.

(141 words)
Introduction

The Government aspires for all children in the United Kingdom to receive one year of preschool education before schooling if their parents wish it. This applies just as much to children with special needs as any other child and indeed nearly all are provided for. However in many instances this has been within a special setting such as nursery classes linked to special schools. A recent trend has been the increased enrolment of preschoolers with special needs into mainstream playgroups, day care and nursery schools.

There is growing evidence that this is the wish of many parents who aspire to see their child socially included with his or her peers and to attend the same facility as their brothers and sisters (Mesibov and Shea, 1996). However staff face particular challenges when enrolling such children not least their lack of knowledge and expertise in addressing the specific learning difficulties that these children experience (York et al, 1999). However organisations such as the Preschool Playgroup Associations have responded by providing a range of training courses. These have been very successful and although precise figures are hard to obtain it is now estimated that the majority of children with special needs attend a mainstream facility for at least part of the week.

Nonetheless staff recognize that some children are harder to accommodate than others. A group particularly at risk of exclusion are those with autistic spectrum disorders. A significant feature of this condition is difficulty in social relationships, communication and imagination (Burack, 1997). They can experience a range of additional difficulties in everyday life such as limited attention span, anger or aggression when things go wrong, poor organisational skills, sleep irregularities and clumsiness due
to poor motor control. They may engage in repetitive play activities and obsessional routines. To date there have been few training opportunities for preschool staff about this condition and how they might best adapt their preschool facility and programme to meet the needs of these children. Consequently they can less informed about this condition (York et al, 1999).

A survey undertaken with 56 preschool personnel in the greater Belfast area found that a sizeable number had experience of taking children with ASD and staff did receive advice and support from a range of professionals. However a majority of staff felt that they have had inadequate or no training and they report a lack of knowledge and skills to help these children (McConkey and Bhurgri, 2003).

Hence the main aim of the present study was to design and evaluate a short course aimed at preschool personnel from a range of facilities including day care and community playgroups. This would focus on practical strategies that groups could use to meet the needs of the children. It was judged that a 10 hour course would provide a compromise between the amount of content to be covered and the length of course that participants would be willing to attend (Trohanis, 1994).

The course was developed as part of an early intervention project for families who had a preschooler with an autistic spectrum disorder (McConkey et al, 2003). The main element of this was a home-based intervention programme in which parents were taught techniques and approaches to promote the child’s learning. These had a demonstrable effect on the child’s development. Many of these ideas were incorporated into the training programme for staff.
Also the speech and language services in two Health and Social Service Trusts had been supporting children with special needs, including autism, in a range of preschool facilities. This experience was also used to inform the training programme.

Finally a specialist teacher for autism employed by the education boards along with the speech and language therapists had developed one-day awareness courses on autism for a range of people including parents, school staff and preschool personnel.

**The Training Course**

The course was developed and tutored initially by two teachers and a speech and language therapist who had a great deal of experience in dealing with pre-school children with autistic spectrum disorders and in working with playgroups and nursery school staff. Subsequently two courses were presented by NIPPA tutors who had taken the course earlier as participants. An autism specialist was also a tutor with these groups.

The course was aimed at personnel working with young children in an early years setting, such as playgroups and preschools. It aimed to enhance participant’s knowledge about autism and of the intervention strategies that are effective in assisting young children to communicate and interact with others.

The specific objectives were:

- to explore how autism manifests in the pre-school child and what difficulties the child may have in the playgroup situation.
- to identify strategies for effectively interacting with children with autism.
- to address the basic principles of behaviour management in the playgroup.
- to develop the participants’ skills including children with autism in the activities of the playgroup.

Course content

The training course consisted of five sessions, each approximately two to two and a half hours. The contents were as follows.

Theme 1: “Characteristics of Autism”  This focused on an explanation of autism – its features and prevalence. Video material was used that had been recorded in clinic and playgroup settings. This contrasted the development of preschoolers with and without autism and showed progress in children over the years.

Themes 2: “Structured Teaching”  The second session demonstrated how autism manifests in pre-school children using case histories. The difficulties that a child would have in a playgroup were discussed, along with ideas of how to deal with them.

The emphasis was on identifying and meeting the need of the individual child in the playgroup. The four elements of structured teaching were introduced in session 2 and developed in session 3, namely, work systems, routines, visual clarity and physical structure.

Work Systems  The main features of the TEACCH approach were demonstrated and the basic principles of managing children with autism were explained.

Routines  Participants were shown how to get the children to work and play by following routines and to follow set steps, for example, from left to right and from top to bottom.
**Visual Clarity**  The fact that children with autism sometimes cannot cope with too much equipment and the importance of reducing the amount of information was demonstrated using examples and videos.

**Physical Structure**  The importance of informing the children of the activities taking place at certain times of the day in the playgroup schedule was emphasised.

*Theme 3: “Communication”*  The fourth session focused on the stages of communication development in both children with autism and children without autism. Effective communication strategies were discussed; concentrating mostly on visual communication strategies. Emphasis was placed on supporting language with objects and other visual supports such as books, menus and choice boards.

*Theme 5: “Bringing it all Together”*  The involvement in the playgroup of parents and speech therapists was discussed and other sources of support were identified such as TEACCH Advisor. (These are a network of people who have undertaken at least a five-day training course in visual communication methods based around TEACCH methodologies). The importance of interagency support and communication was stressed along with how to introduce a child to the playgroup, and the ongoing support that should be given to staff.

**Teaching methods**

The main teaching methods were talks and presentations using handouts and power point overheads, video examples and group activities. The training facility also had a room set out as a dedicated playgroup. This was used to demonstrate how the room
can be organised for individual work and to provide examples of visual communication and play equipment suited to preschoolers with autism.

The course was taken by four groups of participants who were recruited through the Northern Ireland Preschool Playgroup Association (NIPPA). The course publicity made clear that preference would be given to personnel who had children with autistic spectrum disorders in their groups or who anticipated taking such children in the future. Participants paid reduced fees as subvention was available through training grants to NIPPA. In all 82% of participants attended all sessions and the remainder (18%) attended four sessions.

**Evaluation**

The course participants were asked to complete at the start of session 1 a “Pre-Course Questionnaire” that requested details of the playgroup they work in, their experience of working with children with autism and areas they would like the training to focus on.

At the end of each of the five training sessions, the participants completed a “Session Evaluation Form” which recorded their reactions to the content and teaching methods used. Names were not requested on any of these forms nor on the pre-course form.

A “Follow-up Questionnaire” was posted to each participant approximately three months after each course had ended. The time gap was to avoid any ‘halo effects’ arising from the course attendance. Participants could choose to answer the questionnaire via a telephone interview with a researcher or by completing it themselves and posting it back. This provided information of perceived changes in participants’ knowledge of autism and of their attitudes to children with autism attending their groups.
Course Participants
A total of 62 self-selected participants attended the training courses. Nearly half (N=30: 48%) were playgroup leaders or supervisors and a further 25 (40%) worked as assistants. The remaining seven persons (12%) consisted of trainers and advisers. A range of various facilities was represented including community-based groups; day nurseries and crèches, special needs groups, Irish language medium groups, state nursery and private playgroup.

The median length of time people had been working in playgroups or nursery was ten years (range 2 to 30 years) and the median length of time spent in their present post was two years (range 1 month to 22 years).

Of the participants, eight (13%) were aged under 30 years; 17 (28%) were aged 30-39 years; 24 (40%) were 40 –49 years and 11 (18%) were 50 –59 years of age (two persons did not disclose their age). In all 32 (52%) had attended higher education; 20 (32%) had at least O levels and seven (11%) had left school at 15 years (three people omitted this information).

Seven participants (11%) reported having a relative with autism in their autism in their family and in all 18 persons (29%) reported having regular contact with people who had autism in their personal lives. However only 3 persons (5%) reported having a ‘lot of experience’ of dealing with children who have autism in their playgroup; 15 persons (24%) reported ‘some experience’ and 30 (48%) reported ‘limited experience’ with 15 persons (24%) stating no experience.

In all 23 persons (37%) mentioned that they had received no training to date in autism and 28 (44%) described their past training as inadequate. Only 10 (16%) described their previous training as adequate.
Participants’ reactions to the course

Session Evaluations
Nearly all participants rated the length of the sessions as ‘just right’ (95% - 100% across the five sessions) and most felt that the input had made them more knowledgeable about the subject (87% - 100%). Ratings of the helpfulness of the sessions ranged from (88% to 97%) but the percentages were lower about doing something differently in their own playgroup. These were highest for sessions 3 and 4 (82% and 80% respectively) than for sessions 1 and 2 (both 67%) which were more knowledge based.

Very few participants noted something they had not enjoyed about the sessions (0%-3%). One person commented: In the groups some people do not get involved; they keep to themselves and talk among themselves about things not related to the activity.

Changes to the course
Nine of the 62 participants (15%) noted aspects of the course which they had not liked or felt could be improved. These related to insufficient time, better structure to the sessions, the layout of chairs and the use of videos showing children in playgroups. Two people commented on other participant’s behaviours.

A few people attending the course had more experience with autistic children – they did not seem to have time for people like myself with little experience with autism so the group work became rushed.

The course made me feel emotional as my son is being diagnosed as Aspergers. Experiences with children with autism described by the teachers were a bit insulting, as everyone laughed. They didn’t see the serious side of it.
In sum, during the course the training sessions were very well received by the participants.

**Three-month follow-up**

This questionnaire enquired about the aspects of the course that participants had found most helpful; whether or not their attitudes towards children with autism had changed; if they adopted any of the practical suggestions made on the course and their willingness to enrol children with autism in the future. Responses were obtained from 62 (98%) of the 63 participants.

**Helpfulness**

The most common comments about helpfulness of the course related to practical advice they had been given about activities for the children, work programmes, use of schedules and visual aids (32 people mentioned: 52%). In all 15 people (24%) mentioned having a better insight into autism and seeing things from the child’s perspective and 13 people (22%) noted the characteristics of autism.

Among the other features they had found helpful were the personal accounts of others of having children with autism in their groups (5 persons: 8%); working with parents (4 persons: 7%) and finding professional support (2 persons: 3%).

For example, one person commented:

“It opened my eyes to autism. Showed me ways to help children settle into the setting using our own equipment. How to approach parents. I found out about other professionals available. Better insight to autism.”
How to organise work programs and think through a more methodological approach to work programs. Not to be afraid to regress and go backwards rather than forwards.

Gave me more insight into the types of behaviour to expect from children with autism. How to recognise their play. The importance of using more structure in the autistic child’s day.

The use of actual incidents, real life experiences: these helped me to put things concerning autism into perspective, rather than just reading it from a book. All of the information was useful.

Attitudes to autism
Participants were asked if their attitudes and perceptions of the children with autism had changed since taking the course, if at all. All but six participants (90%) stated that they had. In all 34 (57%) reported having a greater understanding of autism; 20 (33%) noted more awareness of strategies for working with these children and 11 (18%) felt more confident in working with these children. Some of the comments made by participants were as follows:

“Before I would have stayed clear of autistic children, as I had no knowledge but was still interested. I am now more confident and optimistic to cope with children with autism in the playgroup.”

“My attitudes and perceptions have changed greatly in that I can now try and understand what an autistic child has to cope with every day. I have also become more patient and understanding while dealing with a child with autism.”
They are not as stubborn as I’ve thought – it is part of their autism and not bad behaviour. I realise that communication has to be visual in concept for them to understand.

My attitudes haven’t really changed. The NVQ level 3 training that I undertook made me aware of what to look out for in the children.

**Adaptations in the playgroup:**
The participants were also asked if they had adapted the activities of the playgroup or changed their approach to children with autism since taking the course. All of those who presently had a child with autism in their group reported doing so but many others who did not have such a child at present have also implemented them, A summary of the responses are given in Table 1.

*Insert Table 1 about here*

The use of the structured teaching approach was by far the most commonly stated change of approach or adaptation of activity mentioned by participants followed by the use of visual structures and simplifying their use of language.

One participant commented:

“I introduced a picture scheme with all of the children so that the children with autism do not feel left out.”

I give autistic children much more time and warning that we’re tidying and cleaning up.

We’re looking at the layout of the room and making areas more well-defined. We need to develop an area for 1:1 work.
As we are a High Scope\(^1\) group I feel a child with autism is greatly helped by our daily routine of labelling of areas. The one-to one TEACCH program fits in nicely with our setting.

**Future enrolment of children with autism**

In all 37 (67\%) of the 55 participants currently working in playgroups reported that definitely they would be willing to have children with autism in their playgroup in the future while a further 17 (31\%) would be willing to consider this if they were asked to do so (one person did not reply to this question). The reasons for both these responses are given in Table 2.

*Insert Table 2 about here*

The most commonly given reasons for definitely accepting the children were the wish to include them in ordinary playgroups as it is their right to attend followed by participants feeling better able to cope with these children. For example:

*Children with autism need to be included in mainstream education to learn to play. It helps them to get into mainstream school and helps to develop their social skills.*

*I have always been willing to integrate special needs children into our group. I feel the course has given me a lot of ideas to use and I have gained a better understanding of autism.*

*We take children into the playgroup on trial period to see how they adapt and cope. We get lots of referrals from social services so this applies to most children.*

*I feel I have learnt a lot more about autism. It is a learning experience for other children and staff to have children with autism in the playgroup.*

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\(^{1}\) Hohmann and Weikart (1999).
Reservations about taking a child with autism centered on the staffing that may be needed and the supports available.

   *We would need a key worker to help with child – paid by outside body.*

   *We would need to consider any other special needs children attending the group. We as a staff team need to be able to cope to be of the most benefit to a child with autism.*

   *We’d be willing to consider if asked, providing there was additional support and advice from other professionals.*

**Further training**

In all 47 (76%) participants mentioned at least one topic or issue on which they would like further training but these covered a wide range. Further training in structured teaching such as TEACCH methods were mentioned by 12 persons; communication, speech and sign systems were noted by six persons; five persons wanted more practical - ‘hands-on’ – training in organizing the group and four person wanted to know more about accessing professional support. Other topics mentioned were working with parents, coping with aggressive behaviours and dealing with more severely affected children. Some comments were:

   *More about suitable materials and equipment. More in-depth knowledge on structured teaching and TEACCH.*

   *Information on support available to groups. Who to report suspected autism to before discussing it with parents.*

   *More information on how early years settings implement the information discussed on the course without the luxury of high adult:child ratios.*
Training on making a programme to help the child and yet incorporating the other children so as not to isolate the child with autism.

**Tutoring the course**

Among the course participants were five persons who already acted as trainers on courses run by the Northern Ireland Preschool Playgroup Association. It was intended that they would tutor future courses and their attendance would prepare them for doing so. Their main concern was their lack of practical experience of dealing with such children in a preschool facility.

*I’m very interested in gaining more experience and confidence in participating in teaching this course. I feel at present I don’t have enough experience of the course content. The trainers who took my course were very experienced workers with children and this really helped to make the course more interesting and informative.*

They also had this recommendation:

*Before tutoring on this course I feel it would be useful for tutors to work collectively to produce a training package which would include acetates and lesson plans.*

They had a number of ideas for improving the course.

*More question and discussion times, for example about strategies to use in the playgroup.*

*Opportunities to encourage participants to share their own experiences or concerns in introducing or working with autistic children.*

*Provide more opportunities for hand-on experience in operations work systems and creating appropriate work tasks. Maybe arrange to visit to a centre working with children with autism.*
Discussion
Overall the course was well received by the participants; it increased their knowledge and understanding of autistic spectrum disorders but more significantly most staff reported implementing the teaching approaches and strategies taught on the course into their groups and they were more willing to accept children with autistic spectrum disorders into their groups in the future.

A five session, ten-hour course cannot address all the issues relating to this complex topic and participants did identify the need for further training. Nonetheless it is encouraging that a comparatively short course can yield so many benefits to the participants. In part this was due to the judicious selection of the topics that were covered in the course with particular emphasis being placed on practical steps that groups to take to accommodate the needs of these children (Trohanis, 1996).

The use of visual communication, routines and the physical structuring of tasks and play activities were all easily implemented and as some participants they proved to be compatible with other approaches such as High Scope (Hohmann and Weikart (1999). Indeed even those participants who did not have a child with an autistic spectrum disorder reported introducing them in to their groups to assist particular children. Hence participants requested further opportunities to gain more expertise in these methods.

One avenue worth exploring is for places to be made available to preschool personnel on specialist training courses on autism that health, social services and education might provide. The introductory course of the sort described here would serve as a useful primer for their participation. Joining with other service personnel for
specific training would also help to build networks between preschools and other professionals.

The issue of tutors is somewhat harder to address. Often those professionals with expertise in autism have little or no experience of preschools and likewise experienced preschool leaders and trainers may have limited expertise in autism. In this instance one possible solution is for courses to be jointly tutored by people with complementary expertise. A network of tutors could be identified within a region to facilitate this.

A second solution is for a training resource pack to be produced that will guide tutors though the course content and methods. Such a pack is now available (Crawford, Crozier and Doherty, 2003). However it is recommended that a ‘training for tutors’ workshop is held to familiarize new tutors with the course materials; to boost their confidence in addressing this topic and to provide mutual support for one another during course presentations.

A third option should become more feasible as more people in preschools gain expertise in taking children with autistic spectrum disorders, namely that successful practitioners become tutors and advisers for their colleagues. They could combine a tutoring role with the provision of hands-on guidance through advisory visits to preschools. These autism advisers could be allied to either statutory or voluntary agencies. McGregor and Campbell (2001) also noted the need to have advisers available to teachers in primary schools to address the individual needs of the child.

It is encouraging that most preschools in this study were prepared to enroll children with autistic spectrum disorders and although this self-selected sample may
over-estimate the willingness of staff to do so, there is evidence that a short training
course can change people’s opinions. This acceptance of children with special needs is
in line with Government aspirations towards social inclusion and the wish of the majority
of parents of preschoolers for their child to attend mainstream schools (McConkey and
Bhurgri, 2003).

That said, there may well be a need for some children to attend special units
because of the severity of their needs. However many of these units aim to organise
part-time placements in mainstream preschools so that the child has both experiences.
These arrangements offer opportunities for staff in ordinary preschools to get advice and
support from educationalists with particular expertise in autism. Hence such linkages
should be actively encouraged.

Training courses for preschool personnel represent a new wave of approaches in
the field of autism. Up until recently, autism was the preserve of specialists who alone
had the knowledge and expertise to make a diagnosis of the condition and/or provide
the requisite interventions usually under very specialised conditions. Proponents of
particular approaches vied with and criticized one another about which was best (Hurth
et al, 1999).

Although such disputes remain, there is now a recognition that most of these
children can be accommodated in mainstream settings provided some adaptations are
made to staff attitudes and practice. There is still much we have to learn about how
best this can be done and indeed on the possible limitations of this approach. However
it is apparent already that the beneficiaries are not only the affected child but also the
staff and the other children with whom they interact. Preschools then are truly learning communities.
References


Table 1: The number of participants reporting adaptations in their approach to children with autism after the course (N=48)

<table>
<thead>
<tr>
<th>Adaptations of activities/ changes of approaches</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introducing clear routines to group by using structured teaching (setting up schedules, making activities, physical structure)</td>
<td>25</td>
<td>52%</td>
</tr>
<tr>
<td>Assisting children with visual structure</td>
<td>7</td>
<td>15%</td>
</tr>
<tr>
<td>I have adapted my communication by simplifying my language</td>
<td>6</td>
<td>13%</td>
</tr>
<tr>
<td>1:1 work time</td>
<td>5</td>
<td>11%</td>
</tr>
<tr>
<td>Increased observation of children</td>
<td>3</td>
<td>6%</td>
</tr>
<tr>
<td>Daily notebook for mother</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Try to involve children in all activities</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Heightened awareness of the child’s likes and dislikes</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Focus on the child’s concentration</td>
<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>

* participants could give more than one response.
Table 2: The reasons given by participants for enrolling children with autism in their playgroups.

<table>
<thead>
<tr>
<th>Reasons for definitely being willing to enroll the children</th>
<th>N (n=37)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autistic children should be integrated into mainstream and not excluded/ they have same rights/ benefits mainstream children</td>
<td>18</td>
<td>49%</td>
</tr>
<tr>
<td>I am more knowledgeable about/ confident with autistic children now</td>
<td>9</td>
<td>24%</td>
</tr>
<tr>
<td>It is satisfying/ challenging to watch children develop</td>
<td>6</td>
<td>16%</td>
</tr>
<tr>
<td>The children in our playgroup have been turned away elsewhere</td>
<td>4</td>
<td>11%</td>
</tr>
<tr>
<td>Need playgroup for support to parents.</td>
<td>4</td>
<td>11%</td>
</tr>
<tr>
<td>I am very eager to help any children</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>I am more aware of the support network through the contacts because of the course</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>It’s a learning experience for staff to have children with autism in the playgroup</td>
<td>1</td>
<td>3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reasons given for being willing to consider enrollment</th>
<th>N=17</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depends on number of staff / if enough for 1:1 attention/could they cope</td>
<td>5</td>
<td>29%</td>
</tr>
<tr>
<td>Characteristics of the child: need to consider severity of autism</td>
<td>3</td>
<td>18%</td>
</tr>
<tr>
<td>Need additional staff/ financial support and advice from professionals</td>
<td>2</td>
<td>12%</td>
</tr>
<tr>
<td>Our group should be open to all children</td>
<td>2</td>
<td>12%</td>
</tr>
<tr>
<td>I am more confident in dealing with these children</td>
<td>2</td>
<td>12%</td>
</tr>
<tr>
<td>I feel I need more experience in working with children with autism</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>It would depend on other special needs children in the group at the same time</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>Would staff training be available</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>I would take child for trial period</td>
<td>1</td>
<td>6%</td>
</tr>
</tbody>
</table>

* participants could give more than one response.