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Successes and difficulties in the individual inclusion of children with Autism Spectrum Disorder (ASD) in the eyes of their coordinators

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This study examined the inclusion of children with Autism Spectrum Disorder (ASD) in regular classes and analysed the factors related to its success and failure. Thirty-seven inclusion coordinators participated in the study and conveyed their view about their own experience. The qualitative methodology used in this study was comprised of regular bimonthly reports by the inclusion coordinators, a comprehensive report on one successful and one 'problematic' event of their student, and focused open interviews with the inclusion coordinators. Two general categories emerged for success and failure: the included student's functioning (behavioural, social, cognitive) and the inclusion environment (collaboration, attitude, organisational aspects). Two general categories emerged from the analysis of success and difficulty factors: the inclusion environment (didactic aspects, the environment's behaviour) and the student's functioning (personal/internal factors, social skills, stereotypical behaviour, student's individual abilities). Implications of these findings are discussed.

Keywords: individual inclusion; autism; success; difficulty

Introduction

The last 20 years have witnessed unprecedented progress in autism research. A great deal of information has been amassed, more efficient interventions have been developed, and the tendency to include children with Autism Spectrum Disorder (ASD) in the general population has increased (Koegel and Koegel 1995; Twyman 2007; US Department of Education 2000). Furthermore, the number of diagnosed children is rising and in the last decade this number increased five-fold (Dybvik 2004).

Autism has been defined as a pervasive developmental disorder marked by social and communication impairments along with a restricted repertoire of activities and interests (American Psychiatric Association 1994; Jarrold, Boucher, and Russell 1997).

Inclusion of children with ASD

Educational inclusion of students with disabilities has been widely promoted in recent years, resulting in an ever-increasing number of students with disabilities, including students with ASD being provided with all or nearly all of their services in general

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education classrooms (Bailey and McWilliams 1990; Mastropieri and Scruggs 2000, McLeskey, Henry, and Axelrod 1999).

Inclusion refers to teaching children with special needs together with typical peers. The idea behind inclusion is that every child should be an equally valued member of the school culture. Children with disabilities benefit from learning in regular classrooms, while their peers benefit from being exposed to children with a diversity of talents and temperaments (Dybvik 2004).

Usually students with autism receive various types of support. For example, they may receive the assistance of one-on-one professional aides who are present in the general education classroom, shadowing the student, either at all times or part of the time. They also may be allowed to leave the classroom from time to time for treatment sessions or private learning (Mesibov and Shea 1996). Appropriate organisational preparation, job definitions, training and support to all the staff, as well as collaboration among the staff, are common features in all types of inclusion (Dybvik 2004; Hunt and Goetz 1997; Iovannone et al. 2003; Kasa-Hendrickson 2005; Kohler, Strain, and Shearer 1996; Simpson, Boer-Ott, and Smith-Myles 2003; Vaughn et al. 1996). Such features should enable the implementation of an individualised inclusion programme that is continuously evaluated (Dybvik 2004; Gena and Kymissis 2001).

When inclusion is suitable, both the included children and their typically developing peers can benefit (Dybvik 2004). Portraying the unique characteristics of ASD to the peers improves the way they treat and value atypical behaviours of the diagnosed student (Campbell et al. 2004, 2005). Some researchers also emphasise the importance of giving the students in the class valued roles (Farlow 1996; Harrower and Dunlap 2001; Schmidt 1998; Vaughn et al. 1996). Some other research mentions the importance of special preparation for the children with ASD. This preparation includes behavioural, learning, social and emotional aspects (Burack et al. 2001; Hunt and Goetz 1997; Kohler, Strain, and Shearer 1996; Mesibov and Shea 1996; Ochs et al. 2001).

Studies conducted both in Israel and elsewhere have found that children with autism display more social behaviour when among typical children than among other children with autism. Students with special needs, including students with ASD, who are fully included (1) exhibit higher levels of engagement and social interaction, (2) give and receive higher levels of social support, (3) have a wider social network, and (4) have more advanced individual education goals than their counterparts in segregated placement. Included students have the chance to meet more positive role models, and to become members of the same society that they will eventually share as adults (Farlow 1996; Fryxel and Kennedy 1995; Harrower and Dunlap 2001; Hauck et al. 1995; Lord and Hopkins 1986; Reichenberg 2000; Zonolli, Daggett, and Adams 1996). Similarly, it has been found that there is no advantage to acquiring academic and language skills in a special education class as opposed to an inclusion framework (Harris et al. 1990; Harrower 1999). Nonetheless, the importance of inclusion as a social principle has been clearly noted as well as the need for promoting its value among parents of students in high-status classes and schools, and among the principals and teachers who work in those settings (Willms 2003).

The principal's role in an inclusion programme is one of the major components that make up a good inclusion programme (Hipp and Huffman 2000). Teachers cannot do what is necessary without the input, supervision, support, understanding,

and collaboration of the principal. The success of an inclusion programme will depend on how much the principal believes in the project. If support is not forthcoming the teachers will begin to feel that they are out on a limb and working on their own. The principal sets out the philosophy of the school; he or she is the role model for the teacher and the entire school can change dramatically when the principal leads the way to best practices (Graydon 2006). To ensure the success of inclusion, it is important that principals exhibit behaviours that advance the integration, acceptance, and success of students with disabilities in general education classes. Therefore, they are expected to design, lead, organise, and implement programmes for all students including those with special needs (Sage and Burrello 1994). Principals with more positive attitudes and experiences are prepared to place special needs children in less limiting frameworks (Praisner 2003). Horrocks, White, and Roberts (2008) found that the most significant factor in predicting both a positive attitude toward inclusion of children with disabilities and higher recommendations of placements for children with autism was the principal's belief that children with autism could be included in a regular education classroom.

There is much concern among parents and teachers about the effectiveness of inclusive education for children with autism. For example, many children with autism depend on one-to-one teaching, at least for part of the day, and find it impossible to work cooperatively with other pupils. Play and other joint activities may become aversive to the included child due to social and communicative deficits. They will also require a more directive input from teachers if they are to make progress. However, the essential presence of a learning support teacher may limit the overall interaction that the classroom teacher has with included students (Adamowycz 2008).

Inclusion of children with ASD in Israel

The Special Education Law in Israel has been in effect since 1988 (Ministry of Justice 1988). However, only a few regulations concerning the support of ASD students have been implemented (ALUT – The Israeli Society for Autistic Children 2004). In 2006 about 600 students with autism were integrated into the regular education system, using the option of individual inclusion. Individual inclusion refers to the placement of the student in the regular system with or without an assistant. Other options are versions of small classes that include ASD students; these were not included in this study.

The Israeli Ministry of Education supports students with special needs who are assigned to the special education system. However, individual inclusion in regular education requires specific support within this system. Therefore, a supplement to the Special Education Law was added in 2002 (Ministry of Justice 2002). It states that a special inclusion committee should determine the additional services to be granted to the student. These services may include additional learning, psychological consultation, and assistance in class (e.g. a personal helper). The educational staff is required to design an individualised education programme (IEP) specific to each student for the full year of study.

One of the major resources is the personal helper. Nevertheless, limited budgets dictate only a minimal allocation of support hours and very low pay. This result in a shortage of helpers, and those who are hired often lack the essential educational preparation and skills. Consequently, many parents provide extra pay, to enlarge the support of their child (Leibowitz 2000).

In recent years several parents' organisations have sued the educational system, maintaining that it was not adhering to the Special Education Law. Most of these claims won the court's support and parents are now waiting for a major breakthrough in the enforcement of this law. At this point in time, the Special Education Law with its inclusion implications has still not been fully implemented in Israel. During this transition phase, parents who were eager to promote the inclusion of their children have taken a major part of the load. They hired professionals better trained than the helpers who were operating in the education system. The parents required that these professionals have an academic degree and be trained for the purpose of inclusion. They termed their role 'inclusion coordinator', to differentiate their function from the helpers. Most of these coordinators were hired and partially paid for by the families; however the education system provided partial support to some families. In order to ensure quality inclusion, families hired a supervisor for the programme, who was in charge of selecting and advising the coordinators. Inclusion schools were selected by the supervisors based on their willingness to support the programme. School principals and superintendents were fully involved in monitoring the implementation of the inclusion programmes.

An inclusion advisor is a professional responsible for designing the inclusion programmes, presenting them to the families and the education system, and guiding the inclusion coordinators who work directly with the students in the educational environment. The inclusion advisor usually meets with the inclusion coordinators on a weekly basis, maintaining regular contact with them in order to solve any ongoing problems.

As part of the effort to promote the individual inclusion, a special course for coordinators has been offered by the major parents' organisation in Israel (ALUT – The Israeli Society for Autistic Children 2004). It is important to note that before this inclusion course, no training in this field had been offered in Israel. In the few programmes where inclusion advisors were employed, they trained the coordinators based purely on their professional judgement and experience.

In light of the rise of educational inclusion of children with ASD in Israel, there is a growing need to examine the issue of inclusion and to analyse the factors responsible for its successes and failures. The current study aims to examine these issues from the viewpoint of inclusion coordinators who work with included students both at school and at home.

Research questions

- What are the instances of successes and difficulties when including students with ASD in a general education setting, as described by inclusion coordinators?
- Which factors are involved in the successes and difficulties of including students with ASD in a general education setting?

Method

The participants in this study were 37 inclusion coordinators who spent one year integrating children with ASD into the regular education framework, either in kindergarten or in school. All of these children had basic interaction and verbal skills. However, they all needed a certain level of support to become integrated into the regular classroom.

As part of their work, the coordinators typically spent three days a week with the children with ASD in the classroom and in the schoolyard. On the other three days of the children's six-day school week another coordinator worked with them. In addition, coordinators reinforced the students' various abilities in terms of day-to-day functioning and academic learning in the children's homes after school hours.

The coordinators had contact with all the parties involved in the inclusion process. They were present in the classroom and took part in all of its activities. They cooperated with the homeroom teacher and the professional teachers, and were part of the teaching and learning processes in the lessons. During recess they were witness to the mutual relations formed between the included student and the other children. The coordinators were in contact with the principal and other staff members. Moreover, the coordinators were familiar with the home and family and saw the student in his or her natural environment. For these reasons, they could provide the broadest and most comprehensive perspective of inclusion.

Coordinators were aged 22–40 years; one-third of them had children of their own. All of the coordinators were high-school graduates and half had a BA, in various disciplines. Although none had been trained specifically for inclusion, the majority had undergone short training periods given by the inclusion advisors with whom they worked.

All coordinators took part in a one-year training course in the process of working with the included students. The course included ten meetings of five hours each; a meeting was held every three weeks throughout the academic school year. The first part of each meeting consisted of a theoretical lecture on a variety of inclusion subjects. The lecturer, who held a PhD in behaviour analysis, was experienced in didactics, pedagogy, and the issue of inclusion of students with special needs in the general education school system, and had been selected by the Ministry of Education to design an educational inclusion model specifically for children with autism. The second part of the meeting was devoted to workshops in which issues derived from their daily inclusion activities were discussed with two instructors. Both workshop instructors had a rich background in training for the inclusion of students with ASD in different educational settings. Subsequent to each meeting information was provided on a website supplying relevant materials and offering a forum for discussing various practical issues. The site served as a host for the questionnaires filled out by the participants every two weeks.

The following qualitative tools were used in the current study:

- Regular bimonthly reports – as part of their training programme requirements, coordinators were asked to fill out bimonthly open questionnaires for a period of four months. The coordinators reported any salient instances of inclusion difficulties and successes that had occurred over the two previous weeks, and their possible causes.
- A comprehensive report on one instance of success and one instance of a 'problem' – within the same course framework, the coordinators were asked to report on one significant instance of success and one significant instance of difficulty. The report was written in the final two months of the year, after the coordinators had become familiar with the students and the system. At this stage they had accumulated enough instances of successes and difficulties from which to select the instances they regarded as most significant. The report was written in great detail and included: background on the school, the class, and the academic staff;

general background on the incident and the circumstances leading up to it; results of the incident; and the coordinator's reason for choosing that particular incident. Eight reports were selected for data analysis. They represented the most meaningful and insightful incidents, and offered a comprehensive description and understanding of the inclusion process. Three experts reviewed the questionnaires and selected the most appropriate ones based on agreed upon criteria. Stake (1995) points out that when selecting informative subjects it is imperative to select individuals with the capacity to provide instructive information. For this reason, choosing the right coordinators for the reports and for the interviews was crucial.

- Focused open interviews – interviews were conducted with the eight coordinators whose reports were selected for analysis. Each interview was conducted one year after the end of the school year and was held at our work location in the college (it was the most convenient place for the coordinators). Coordinators were first asked about their general work throughout the school year. They were then questioned further about the incidents they had described in their comprehensive reports. As many details as possible about the instances of success and difficulty and the factors leading up to them were elicited from the coordinators. Interviews were scheduled individually for each interviewee at times convenient for them. Each interview lasted approximately two hours. During the interview the coordinators were asked to refer again to the incidents they wrote about in their comprehensive reports. In this fashion, descriptions and explanations regarding the data presented in the report were extracted from them (Shkedi 2003). The interviews were transcribed almost verbatim.

The main benefit of using these three tools is that each one relates to a different time period: the first relates to the present, the second to the recent past, that is, several months back, and the third to the distant past, almost a year prior to the interview. Using several time periods enabled the coordinators to observe and react to the incidents from different temporal perspectives. Triangulation was used by using three different tools.

Data analysis was based on the research questions (Miles and Huberman 1994; Yin 1994). The data collected from the three tools were analysed by the three researchers and emergent categories were discussed. The categories were divided into statements which were then classified according to the central research question topics: instances of success, instances that presented difficulties (problems), success factors, and difficulty factors. The statements in each topic were then categorised and sub-categorised. Despite the many similarities found among the results of the three tools, a number of differences did emerge. These differences are discussed and presented in the findings and discussion sections.

The issues of trustworthiness and accuracy were addressed several times throughout the study. First, to maintain consistency with the research questions, we began by classifying the statements according to the central research question topics. To address further threats to the accuracy of interpretation, each researcher independently analysed the data. Then the researchers jointly discussed their analyses, resolving discrepancies through the review of relevant data. Colleague checks also addressed the accuracy of interpretation. The participants of the interviews were asked to review the transcripts and if necessary add more explanatory information.

Results

The first part of the findings will describe how the coordinators perceived the instances of successes and difficulties when including students with ASD in a general education setting. The second part will present the factors to which the coordinators ascribe those successes and difficulties.

Successes and difficulties in inclusion

Success in inclusion – the included student in the middle

Instances reported of success, as described by the coordinators, focused almost entirely on the included student, mostly in the social domain, which characteristically presents difficulties for children with ASD. Success in the social domain mainly involved good relations with peers, but relations with individual friends and adults were also noted:

The children received Lea very well and she is accepted among her classmates. The girls like her and argue over who will sit next to her in class. It was very exciting for me to see in her such a significant social development: from a sad and lonely child to a well accepted and loved one. During the year the family went abroad for a month. When Lea returned, the children gave her such a warm welcome, and so much love – they really missed her. It is heartwarming to see how loved she is by her classmates.

The reports of success in the social domain are not surprising. Studies conducted both in Israel and abroad have found that the behaviour of children with autism is more social when among typical children than among other children with autism. Students with special needs, including students with autism, who are fully included exhibit higher levels of engagement and assimilation, give and receive higher levels of social support, and have a wider social network and more developed educational aims. Included students have the chance to meet typical role models, and to become members of the same society that they will eventually share as adults (Farlow 1996; Fryxel and Kennedy 1995; Harrower and Dunlap 2001; Hauck et al. 1995; Lord and Hopkins 1986; Reichenberg 2000; Zonolli, Daggett, and Adams 1996).

Instances of success were mainly associated with the social domain, and apparently reflect the high expectations held by the coordinators and the children's families that these children should be advancing in this area. ASD is characterised by communicative/social difficulties which hinder the child's inclusion in the general school setting, and the majority of studies focusing on inclusion of children with ASD deal with this aspect (e.g. Farlow 1996; Fryxel and Kennedy 1995; Harrower and Dunlap 2001; Hauck et al. 1995; Lord and Hopkins 1986; Reichenberg 2000; Zonolli, Daggett, and Adams 1996). For this reason, any development in this domain was immediately expressed in the coordinators' feedback.

Reports on instances of success in the behavioural domain included incidents where students exhibited an ability for self-help, independence, meeting demands, coping appropriately with transitions and changes, and self-restraint and perseverance, while conversely, stereotypical behaviour was reduced or stopped.

The behavioural domain also reveals the unique characteristics of ASD. Behavioural difficulties such as inflexibility in routines, adherence to non-functional rituals, repeated stereotypical body gestures, resistance to change, and excessive obsession with certain parts of objects are fully described both in the DSM (*Diagnostic*

and statistical manual of mental disorders, American Psychiatric Association 1994) and in the scientific literature as behaviours characterising children diagnosed with ASD (Jarrold, Boucher, and Russell 1997):

During the kindergarten field trip to a petting zoo in a nearby town, Avi was well behaved throughout the bus ride, moved from place to place with the group, kept eye-contact with the guide, and showed interest and was attentive to the surroundings. At the picnic he conducted himself well while we ate, despite the change in environmental conditions. He was attentive and quiet during instruction and at the end of the day he even held rabbits in his hand and then petted a large dog – he had overcome his fear and rejection of animals.

Instances of success in the cognitive domain, although few, included reports on improvement in learning skills and academic skills in all subjects. In some cases, included students managed to reach the class average, or even a higher level. Their concentration improved and they managed to perform like their peers in the classroom in terms of class participation and meeting academic task requirements:

At the beginning of the school inclusion, David could not read or write. He executed basic reproduction of shapes and lines – drawing a square would take him a long time. Today he can read and write at an appropriate level (comparable to the average of his peers), although there are still many diction problems and difficulties.

It is interesting to note that less consideration was given to cognitive/learning aspects; also, it has been found that there is no advantage to the acquisition of academic and language skills in a special education class as opposed to an inclusion framework (Harris et al. 1990; Harrower 1999). It seems that, in the view of the coordinators, the academic expectations are not as important as the social and behavioural aspects. This situation report may harm the inclusion programmes original aim to treat the included student like any other student. The solution to this problem is complex and should include clearly defined expectations emphasising academic achievements.

Difficulty in inclusion – focusing on the included students and their environment

In contrast to instances of success which focused almost entirely on the included student, the instances of difficulty described by coordinators focused both on the child and the environment. Several issues were related to difficulties within the inclusion environment. Coordinators reported problems which derived from faulty relations among the parties involved, lack of concurrence regarding the best course of action, or lack of cooperation among staff members involved in the inclusion (other coordinators, teachers, advisors, and parents):

The team was constantly being replaced. No one lasted. There was no clear plan of action and/or systematic instruction. About two months after my arrival, the staff advisor went abroad. The child's behavior was dramatically affected. For instance he began to suffer from constipation. He had no instruction or explanatory workshops – as a team, we felt completely helpless. When the advisor returned, she read the accounts reported during her absence and decided to implement a plan based on physical education. During each shift the caretaker was required to run one kilometer with the child. Just like that without any training or consultation with the staff. The staff was embittered over the decision and began writing false reports and incorrect descriptions in the contact journal.

The inability of the inclusion framework (kindergarten teachers, teachers and advisors, professional teachers, principal) to accept and treat the included child in a decent

manner can be caused by a bad attitude or inept management, and is perceived as one of the prominent difficulties:

In my opinion Sara's homeroom teacher is awful. She is not emotionally available for inclusion and she gives the feeling that she should be saluted for the fact that she had even agreed to take such a child under her care. During staff meetings or meetings with the inclusion coordinator, she tends to talk about her own private matters and one can not interest or challenge her on any matter regarding Sara.

Many people are involved in inclusion: the school principal, the homeroom teacher, professional teachers, inclusion coordinators, the psychologist and school advisor, the Regional/Community Support Center (RCSC). The RCSC provides services and support both in and out of school to students with special needs, and to their parents. For such a large number of people to work together, appropriate organisational preparation is required. Therefore, collaboration among all of them is imperative and meetings with the entire staff must be scheduled regularly. There is no doubt that at the root of successful inclusion lies in collaboration among the staff members. Collaboration should include delegated responsibilities and roles, as well as mutual decision-making and forms of action (Dybvik 2004; Simpson, Boer-Ott, and Smith-Myles 2003; Vaughn et al. 1996).

Other organisational problems occur when job definitions in the inclusion environment are unclear or ambiguous. For example, a teacher may refuse to check a student's academic work because in her opinion it is the coordinator's job, since she will do so in any case. Furthermore, all teachers should approach all students with thoughts and practices that would lead them to engage in meaningful academic opportunities with their peers (Kasa-Hendrickson 2005).

Reported instances of difficulty in the inclusion environment emphasise the importance of cooperation among the coordinators themselves, and between them and the academic staff. The inclusion model implemented thus far in Israel is based on the work done by coordinators hired and trained by forces outside the school, which are the family's responsibility. This type of situation is by its very nature highly sensitive. As the coordinators have ties to the family, they can be perceived by the academic staff as representing the 'other side'. Indeed, such sensitive situations were described in the coordinators' reports as possibly harming the entire process. This obstacle emphasises the need for preliminary work prior to the start of the academic year as well as over the course of the year, so that collaboration and cooperation between the coordinators and the academic staff may be established. It appears that defining the coordinator's role and place is a significant challenge to the entire inclusion process. It may be that in coming years coordinators will be chosen and trained by the education system – a process that would alleviate this problem.

Difficulties which were related to the included student with ASD were found in all three domains: behavioural, social and cognitive. Instances of difficulty in the behavioural domain, which occurred most often, referred to violent behaviours towards other children, such as grabbing a toy from another child or pushing when standing in line; having difficulty coping with changes in a schedule, task or place; disobeying instructions and requests, such as picking up toys after play; and difficulty in self-containment (especially among the kindergarten children). Other instances of difficulty included stereotypical behaviour, such as echolalia and ticks. Such difficulties are also described in the professional literature of children with ASD (Jarrold, Boucher, and Russell 1997).

Social difficulties in ASD children pertain in part to speech and communication. For example, the included children did not know how to react when someone grabbed something out of their hands. They were unable to say what they wanted and could not ask for help when in need. When communicating with their peers, included students often exhibited abnormal and sometimes extreme behaviour:

David studies football with a private teacher. Following changes that have recently taken place we decided to try and place another student with him. The first time David played football with his friend who plays at his level, or even below, he lost 0–3 and took the loss very badly. At the end of the lesson, David cried. The second time, David played against another friend. We chose him so that he would have a positive experience, so that he would have an opportunity to win, but nevertheless, David lost 0–3. It turned out that he lost due to the pressure. David was completely devastated, sprawled out on the ground and burst into tears. He thought about the incident and cried all through the weekend. The incident had a significant effect on him.

Despite the similarity between the social and behavioural domains, the latter is concerned mainly with inappropriate behaviour. This observation sheds light on how sensitive the education system is to including children's functioning and to any deviation which may disrupt educational conduct on the part of other children or the school as a whole. It is therefore important to provide a clear and well reasoned explanation to the school community (academic staff, students, and parents) in all matters pertaining to the characteristics of ASD and the aims of inclusion. In this way, slightly unusual behaviours may be more naturally accepted and given less attention by the surrounding environment.

When included children are older it appears that finding a common language with peers becomes much more difficult. Social and verbal communication becomes more significant as the peer group spends more time sitting and talking. Children with ASD have greater difficulty with understanding and expressing language when facing other children. Learning difficulties increase with age as well. Part of the academic material becomes impossible for the included students to comprehend: 'How can you explain to A. the term "pre-history" when the term "recent past" (such as "the day before yesterday") is unclear to him?'

Success and difficulty factors

The coordinators perceived the factors related to success and difficulties as related especially to the environment's inclusion. In addition, the functioning of the coordinator was related to success factors, but on the other hand the functioning of the included student was related to the difficulties' factors.

Regarding the coordinators, adequate preparation of all the parties involved in inclusion is a significant factor in the success of inclusion. Preparation includes the school staff and the inclusion team, the classroom students, and their parents. Training the staff includes providing an explanation of the child's disability, the principles of inclusion, the coordinators' role, agreed-upon expectations, and role delegation among all the responsible inclusion parties, together with establishing a well-coordinated meeting schedule. In addition to theoretical lectures and explanations, training can include role playing and films on the subject. Similarly, regular staff meetings should be scheduled in advance. The coordinators' reports indicated that after such preparation the teachers better understood their role.

The research literature emphasises the importance of providing training to the staff. When such training and support exist, general education teachers tend to be more willing to accept students with ASD within their classroom. Therefore, it is important that regular teachers receive proper training, even in-service (Dybvik 2004; Hunt and Goetz 1997; Iovannone et al. 2003; Kohler, Strain, and Shearer 1996; Vaughn et al. 1996).

The coordinators attributed importance to the preparation of the classroom students' parents before the start of the school year, including a discussion on the disability and the essence of inclusion, as well as what they could contribute to its success. Parents' questions should be considered carefully, and they should be given the most up-to-date information available. The experience of the coordinators showed that parents with resistance to inclusion at the beginning of the year had changed their opinion by the end of the year and supported the inclusion.

Preparing the classroom students for inclusion was also perceived as one of the important factors for successful inclusion. In order to increase levels of support and acceptance, it is recommended that a meeting be scheduled before school begins, attended by the child's peers, in order to provide them with important information regarding the special qualities and abilities of the student diagnosed with ASD. The way the diagnosed student is presented to his/her peers has a tremendous effect on the success of the inclusion process. Other studies also support the claim that providing an explanation on the unique characteristics of this disability improves the way peers treat and value the atypical behaviours of the diagnosed student (e.g. Campbell et al. 2004, 2005). Due to difficulties that may arise during the year, a single meeting is never sufficient. It is imperative to schedule additional meetings with the peers on a frequent basis for further discussions and evaluations:

As far as the classroom children are concerned, they were given preparation and a talk by the inclusion supervisor and the inclusion psychologist. I explained what they should ignore, how to relate, how to make contact and communicate, etc. Preparation was given before the included children arrived, and another talk was given after their arrival. Every so often a discussion was held regarding a certain issue that had come up.

Some researchers emphasise the importance of giving the students in the class valued roles. In this way the included students will not become objects of pity or ridicule (Farlow 1996; Harrower and Dunlap 2001; Schmidt 1998; Vaughn et al. 1996).

To prepare the inclusion environment properly, the homeroom teacher and coordinators should first be introduced to the included child in his or her natural environment, that is, the home, several weeks prior to the start of inclusion at school:

Solutions and plans of action for dealing with potential future problems should be prepared: getting information on disabilities and abilities, how to address the child, and how to reinforce both the included child and the surrounding environment.

Some research mentions the importance of special preparation for the children with ASD. This preparation includes behavioural, learning, social and emotional aspects (Burack et al. 2001; Hunt and Goetz 1997; Kohler, Strain, and Shearer 1996; Mesibov and Shea 1996). Ochs et al. (2001) found that emotional preparation is important because children with high-functioning ASD can be aware of their condition and be in distress as a result of ridicule and negative activities of others toward them.

Support for inclusion is conveyed when the environment gives a sense of confidence in the success of inclusion and shows a willingness to make it work. The attitude of the school principal, who sometimes determines the 'rise or fall' of inclusion, was emphasised by the coordinators, and it is therefore important to 'recruit' her or his support in the process. In many cases a supportive principal ensures a supportive environment for both the inclusion and the staff:

A principal who simply said 'I'm ready and willing'. She rearranged the school schedule around this child. She selected a teacher according to the criteria I requested. ... A discussion was held with the staff during the preparatory days according to my request. ... Professional teachers were also chosen carefully: for instance, an English teacher who can play guitar because he relates to music.

Today principals are expected to design, lead, organise, and implement programmes for all students, including those with special needs (Sage and Burrello 1994). Principals with more positive attitudes and experiences will be prepared to place special needs children in less limiting frameworks. It is therefore important to allow principals to have positive, practical experience with inclusion of any kind of disability, so that they gain experience through specific practice (Praisner 2003).

When possible, it is recommended to have in-depth interviews with the principal to ensure that his or her readiness for absorption is beyond question. Inclusion is a long, exhausting process with many 'crisis moments'. Strong leadership is needed to coordinate the academic staff around the concept of inclusion and to implement it, and the principal's leadership is a key to its success (Hipp and Huffman 2000).

The coordinators attributed great importance to their abilities and qualifications. Intelligent coordinators with the ability to make use of instruction, the energy to form social relations at recess, the ability to form relations in the school, and the possession of political skills when dealing with the teacher, will contribute to successful inclusion. A coordinator should be able to handle the included child's behavioural and learning difficulties. The coordinator must support the included students only as much necessary; that is, he or she must identify the students' strengths, and at critical times when they are able to use them independently, gradually cut out their assistance and allow them to accomplish the task on their own.

Priming is one of the important parts of the coordinator's job mentioned by the coordinators and in the inclusion literature (Farlow 1996; Harrower and Dunlap 2001; Zonolli, Daggett, and Adams 1996). Obtaining the academic material ahead of time and exposing it to the child before it is presented in the class may prevent frustration, since the child will come to class with a greater sense of confidence in his or her ability to learn, understand, and succeed. Other strategies such as picture schedules, self-management strategies, positive reinforcement, peer-mediated interventions and tutoring, cooperative learning, and prompt delivery (Harrower and Dunlap 2001) were only rarely mentioned by the coordinators as important for successful inclusion.

The coordinators gave great importance to effective communication among all parties involved in the inclusion process: principals, teachers, parents, and staff. Such coordination requires the specification of clear procedures and job descriptions. This will enable the implementation of an individualised programme for the included child. Such a programme is essential for the ongoing evaluation of the inclusion process (Dybvik 2004; Gena and Kymissis 2001). Unfortunately, only few schools allot the time and resources to promote this challenge (Dybvik 2004). The adaptation of the educational setting to the purpose of inclusion may require using audiovisual aids,

adapting the learning tasks' scope and content, providing a variety of communication opportunities, offering alternative activities for some learning tasks, and modifying the curriculum to enable peer tutoring and group learning (Farlow 1996; Harrower and Dunlap 2001; Iovannone et al. 2003).

Relatively little mention of the homeroom teacher's or other teachers' functioning was made by the coordinators. Coordinators wished that teachers were better organised so that material could be given ahead of time, had the ability to handle the class, were more accepting of the 'other', and were willing to cooperate and to ignore atypical behaviours. Such aspects of functioning, according to them, are important factors for successful inclusion. Nevertheless, classroom teachers did not always cooperate. At the declarative level, they said they are ready to help and cooperate, but in practice they acted otherwise:

The classroom teacher was initially open to inclusion which indicated that she would cooperate, but when she was asked to give antecedent material she wouldn't, even though she is a very organised person. The coordinator barely received any material before lessons. There was no cooperation between the teacher and the coordinators. They (the coordinators) were somewhat afraid to address her. They had the feeling they were a nuisance.

The presence of an additional professional figure in the classroom necessitates closely coordinated work. Inclusion principles require the coordinator's functioning to be flexible in accordance with the student's progress. Therefore, there are times during the lesson when the coordinators direct involvement with the included student is unnecessary, allowing her or him to spend time supporting other students. This mutuality principle will enhance the teacher's functioning in the classroom and will give her or him more time to guide the included student. Similarly, such involvement will improve the way in which the coordinator is perceived by the teachers and students in the class, and will lead to an atmosphere of cooperative achievement.

Coordinators also considered the included student's family functioning. Good relations between the coordinator and the family must be established. The cooperation of parents, expressed by understanding, assistance, and lack of over-interference, contributed to successful inclusion:

The family and I have friendly work relations. They are based on open-mindedness and willingness to work together. Dinners and family events – birthday parties, trips – in short, this is a second family in every way. As far as financial matters are concerned – the family pays the coordinators' salaries. Consequently, the only problem is that I feel uneasy when I receive additional benefits.

On the other hand inclusion meets difficulties when the parent does not believe in her or his child's ability to succeed, denies that the disability exists, does not adopt a uniform and clear working method, does not convey a sense of trust in the staff and thereby does not give it any authority, interferes in professional matters even when they are lacking in professional knowledge, and assumes professional tasks (such as breaking down material) which are carried out inadequately:

In the professional area, there is a major problem. The mother allows us no freedom to advance or take action. Every little thing requires her permission. She finds it hard to accept any professional comments or opinions from the part of the staff, even if it is for the good of the child.

Responsibility for difficulties is also projected onto the included student's family. Indeed, the reality in Israel is quite complex with respect to this issue. Parents are intensely involved in a large portion of the inclusion plans. A possible explanation for this may be the fact that parents finance a significant part of inclusion costs and are even responsible for the coordinator's professional training. The emotional relationship between parents and their children often hinders professional decision-making regarding inclusion. This situation sometimes leads parents to interfere in professional matters, which 'threaten' the functioning of both coordinators and school staff. A partial solution to this problem is of course that the education system takes clear financial responsibility for the inclusion process. Still, this difficulty could also be alleviated by providing appropriate training to coordinators, leading to ongoing communication with parents based on predetermined and agreed upon aims. The inclusive school's contribution lies in clearly defining everyone's job in the inclusion process and holding regular meetings with parents and coordinators with the aim of providing clarification and feedback. None of these detract from the importance of contact and cooperation with the families and supporting them throughout the process (Iovannone et al. 2003).

As mentioned above, analysis of the detailed reports and interviews revealed little mention of the functioning of the student as a success factor. The only consideration given to this matter touched upon internal drive factors. Students who are highly motivated and are proud of themselves and their achievements contribute to successful inclusion.

An analysis of coordinators' explanations for instances of success and difficulty in inclusion points to an interesting perceptual difference. In their bimonthly reports, coordinators tied success factors to their ongoing functioning and the classroom teacher's cooperation and support. In contrast, they did not connect reported difficulties to these variables, but rather to the student's disability and limited abilities. This finding is quite significant regarding the inclusion model and coordinator training. On the one hand, the coordinators' sense of ability in terms of creating change and improvement in the included student's functioning should be encouraged. On the other hand, it is important to increase their awareness regarding the link between their functioning and the difficulties which arise in inclusion. If such a link is recognised, the didactic means at their disposal can be enhanced in order to yield better results. To illustrate, an included student may refuse to cooperate after a short period of learning. This can obviously be attributed to his or her limited attention and communication. Still, inclusion literature indicates that providing the student with reminders before and during activities may help resolve this problem (Taylor and Levin 1998).

Other than the inclusion environment, there are factors related to the natural process of growing up which hinder inclusion, such as social behaviour based more on conversation as age increases. For a child with ASD, this process becomes more and more difficult. Similarly, the academic material becomes increasingly challenging.

Summary and recommendations

This study presents successes and difficulties in the inclusion of children with ASD from the coordinators' point of view. Findings from questionnaires and interviews represent the coordinators' perceptions and reflect the unique inclusion model implemented in Israel.

It should be noted that data were collected during the initial stages of the implementation of the Inclusion Supplement to the Special Education Law in Israel. The budget enforced by the law was still lacking and parents had to be involved in partially or fully financing the inclusion process. This problem caused frustration as well as in some cases extreme assertiveness from the parents. It may be assumed that if all aspects and implications of the law were enforced, including mandatory professional preparation for the coordinators, some of the difficulties should be eased.

The findings in this study reflect the coordinators' judgement and therefore are to a certain extent limited. Nevertheless, they should be studied carefully and taken into account in the design of an inclusion model. Specifically, this study contributed to the design of an inclusion model selected by the Israeli Education Ministry (Eldar, Talmor, and Wolf-Zukerman 2005). Replacing the role of helpers with inclusion coordinators was a new concept in the Israeli education system, with both professional and financial implications. The selection of the coordinators had to be much more careful with the traditional helpers and they all had to have an academic degree. This requirement excluded the municipality in most cases from assuming responsibility for hiring and supporting the coordinators because their wages were over budget. In some cases parents received partial support from the municipality and in other cases they had to carry the entire financial load. Nevertheless, parents refused to compromise and insisted on hiring coordinators rather than helpers. This situation threatens the equity principle in which all students are to receive the same level of support. This controversial issue has yet to be solved, and is subject to ongoing discussions and lawsuits.

The data analysed in this study were collected during the formative stage of the inclusion model in Israel. The results presented here are unique in that they represent a new reality in which qualified professionals describe successes and difficulties they encountered in the inclusion job. This initial step should shed light on identifying effective inclusion procedures. The perception of the coordinators is vital because they are the major inclusion change agent within school. Providing them with the right didactical skills for inclusion should affect the entire process and support the included student on the one hand and the staff and administrators on the other hand.

A summary of the findings reported in this study leads to several recommendations concerning effective inclusion:

- Thorough training of coordinators is a necessary precondition to successful inclusion. Coordinator training and employment should be an inseparable part of the formal education system. Shadowing the included child is insufficient and may worsen behavioural problems and negatively effect inclusion.
- Choosing the right school and principal for inclusion is of vital significance regarding all aspects of successful inclusion.
- Teachers, parents and policy-makers should be updated regarding the importance of the social benefits of inclusion.
- To ensure effective inclusion, the school's academic staff, as well as the students and their parents, must be carefully prepared in advance. The social benefit of inclusion both to the included children and to their peers should be explained.
- Aims and expectations of the various parties involved in inclusion must be clearly defined, and continuous cooperation among them must be ensured. Careful preparation for this goal should be made in order to ensure collaboration between all parties.

- The inclusion process must be accompanied by continuous data collection to facilitate individualised evaluation throughout the academic year.

Data analysis also raises the following questions regarding successful inclusion and the reduction of difficulties. These are questions that should be addressed in the future to help improve the inclusion process:

- What are the functional, emotional, and social benefits that justify investment in inclusion?
- What kind of information should be given to the inclusive academic environment and students? Should clear information on the included student's autism characteristics be provided or should this information be minimised as much as possible?
- What are the characteristics of an effective inclusive school?
- How can parents and the academic staff be recruited to support the concept of inclusion?
- What is the relative advantage of employing certified coordinators compared with minimally trained helpers?

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