Towards systemic support of pupils with emotional and behavioural disorders

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Authors’ Biographies

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Abstract

Children with emotional and behavioural disorders (EBD) vary in many respects. In school, specific conditions have to be fulfilled in order to deal adequately with EBD. This study addresses the question how mainstream primary schools design different instructional situations to support pupils with EBD in practice, and how this design could be improved to enhance positive effects on the functioning of pupils with EBD in particular. Theoretically, three sets of educational conditions seem most relevant; the instructional and social-emotional environment, the system of detection and intervention, and the support given to teachers and schools. Case studies were conducted at 12 mainstream primary schools in five different regions in The Netherlands. The results show that the schools focus on providing an adequate social-emotional environment and a corresponding system to detect and manage EBD. However, they lack a coherent pedagogical-didactic structure to integrate diagnosis, special or mainstream curricular levels and materials, and reliable or valid evaluation of social learning results. In addition, they mostly lack a systematic approach to obtaining information from and collaborating with parents and other professionals or external agencies. Specific educational and instructional changes are suggested as concrete possibilities to improve early detection, intervention, and prevention with respect to EBD in mainstream primary schools.

Keywords: Emotional and behavioural disorders (EBD); special educational needs; mainstream primary schools; systematic detection and intervention; ICT
Introduction

Achenbach and Edelbrock (1978) distinguish two main types of emotional and behavioural disorders (EBD). The first type concerns externalizing disorders which include aggression, antisocial behaviour, defiance, impulsivity, and hyperactivity; the second type refers to internalizing disorders such as withdrawal, anxiety, depression, low self-esteem, and obsessive and compulsive behaviour. Various studies have explored the prevalence of EBD, with differing results. Based on a study of mental health of 10,438 children between the ages of 5 and 15 in Britain, Ford, Goodman, and Meltzer (2003) concluded that 9.5% suffered from a psychological disturbance. Of the pupils in primary school, 5 to 6% showed externalizing behaviour, whereas 3 to 4% suffered from internalizing difficulties. Externalizing behaviour was found in boys to a significantly greater extent than in girls: 8.5 and 3.3% respectively in the 5–15 age bracket. Blanchard, Gurka, and Blackman (2006) reported on a national survey of children’s health in the USA conducted in 2003. The data were gathered by interviewing the parents of 102,353 children aged 0–17 years. Among children in the 6–17 age bracket, attention-deficit/hyperactivity disorder was diagnosed in 8.8% of cases, whereas 6.3% suffered from behavioural problems. In The Netherlands, questionnaires processed by 150 teachers were used to gather data with respect to the social-emotional development of 1,243 pupils (Scholte & Van der Ploeg, 2006). According to the teachers, 4.3% of primary school pupils suffered from attention-deficit/hyperactivity disorder, 5.5% behaved aggressively or anti-socially, 2.5% showed defiant behaviour, 7.3% suffered from anxiety or mood disorder and 1.1% from autism.

The differences in prevalence of EBD may be caused partly by the differences in instrumentation used to diagnose the problem, but other influences are present also. Hermanns, Öry and Schrijvers (2005) state that the emergence of emotional and behavioural
problems in children depends on the child’s predisposition and its social context. With respect to personal predisposition, important factors are, for example, the child’s emotional stability and the amount of deliberate control exercised. Muris (2005) claims that children run a higher risk of mental disorder, of an internalizing as well as externalizing type, when they combine a high level of emotionality and a low level of deliberate control. Heredity is an important factor in this respect. In addition, contextual factors have a significant influence. Maras and Kutnik (1999) point out that emotional and behavioural disorders are looked upon mainly as an individual phenomenon, thus neglecting the social context within which these disorders are displayed. According to these authors, the diverse needs of individual children have to be seen as a whole and the child should not be considered in isolation from its family and other contexts. In other words, a holistic view of the child is required (Evans, Lunt, Wedell, & Dyson, 1999).

With respect to the family context, Muris (2005) identifies two relevant dimensions; parental care and parental control. Anxiety in children is associated with a high level of parental control, while depression may involve a lack of parental care. Behavioural problems are associated with a lack of parental care combined with strict parental control. Other aspects that form part of the social family context are life experiences such as mistreatment, parents divorcing, death of loved one, or being bullied. In addition, societal trends may have an influence, such as a dwindling level of solidarity and an increase in the level of threat. Fekkes (2005) found that children who are bullied frequently have a greater risk of developing internalizing EBD.

Furthermore, the school context is of great importance because an inadequate school situation will contribute to the development of emotional and behavioural difficulties (Graham, 2008). Different views and opinions exist about the usefulness and desirability of special education versus mainstream education facilities for pupils with EBD (cf. Croll &
Moses, 2000; Pather, 2007; Sikes, Lawson, & Parker, 2007). These divergences seem to be influenced by unchecked expectations and specifications of instructional and other support that would support pupils with EBD effectively. Some research information is available, however. Meijer (2001) for example clarified that teachers have difficulties in dealing with pupils with EBD, in particular when these pupils attend mainstream education. Other studies also show that teachers in mainstream education find the needs of children with EBD as being most difficult to meet, compared with children with learning difficulties or physical and sensory difficulties (Clough & Lindsay, 1991). Teachers show the least tolerance for pupils with EBD and their placement in mainstream classes (Cartledge & Talbert Johnson, 1996). EBD pupils are unlikely to develop meaningful relationships with peers who do not have EBD (Lewis, Chard, & Scott, 1994). Moreover, there is a reciprocal relationship between social, emotional, and behavioural problems and cognitive learning achievement (Hallahan, Lloyd, Kauffman, Weiss, & Martinez, 2005). The results of studies indicate that between 24 and 54% of learning disabled children have behaviour problems (Johnson, 2002). In comparison with other special needs groups, pupils with EBD are less likely to graduate and have lower reading and mathematics scores (Groom & Rose, 2004). Pupils with EBD are twice as likely to drop out of the education system prematurely as pupils without EBD (Landrum, Tankersley, & Kaufmann, 2003). Children with serious conduct problems run a high risk of developing lifelong patterns of social maladjustment (Kauffman, 2005) and pupils with lower educational attainment run a significantly higher risk of breaking the law after leaving school (Cleary, Fitzgerald, & Nixon, 2004). In addition, frequent and active bullying at school is associated with delinquent behaviour and carries with it the risk that children may develop an anti-social lifestyle (Fekkes, 2005).

Both personal and environmental factors thus seem to influence the development of EBD. Therefore, environmental factors may be used to prevent or reduce characteristics of
EBD. In school, in particular the detection of EBD problems in relation to differentiating qualities of the curriculum are shown to be relevant (Daniels, Visser, Cole, & De Reybekill, 1999). Furthermore, the instructional environment should be attractive and challenging for pupils (Jonassen, Peck, & Wilson, 1999). Social-emotional acceptance by classroom peers is important for EBD pupils, something that can be encouraged by cooperative learning and peer tutoring (Cartledge & Talbert Johnson, 1996). Teacher-pupil interaction at school also plays a role in challenging pupils. Teacher-mediated interventions have been found to improve the academic performance of pupils with EBD (Pierce, Reid, & Epstein, 2004). Research showed that teachers tend to respond to disruptive pupils in ways that amplify the pupils’ inappropriate behaviour, whereas increasing their exposure to academic material, improving the task quality, and paying them more positive attention, have demonstrably positive effects on the classroom behaviour and academic achievements of pupils with EBD (Sutherland & Oswald, 2005).

Research also demonstrates that early detection and – if necessary – immediate intervention using adequate training or education programmes, at home and at school, is critical for children with EBD (Fletcher-Campbell & Wilkin, 2003). Primary schools can play an important role in the early detection and adequate treatment of pupils who suffer from EBD or who are at risk of developing EBD. However, Landrum et al. (2003) stressed that pupils with EBD are not typically identified at an early age when their problems are most amenable to treatment, and that probably only a fraction of those who need intervention actually receive treatment. Hallahan et al. (2005) pointed out that most emotional and behavioural problems are not addressed until they have become severe and protracted. These authors stated, moreover, that prevention in terms of detection and treatment is usually lauded in principle but is often not practised. They refer to specific conditions that have to be fulfilled in schools in order to detect EBD at an early stage, to provide treatment to EBD pupils, to
reduce the disruption EBD pupils cause in the classroom environment, and to prevent pupils from developing emotional and behavioural disorders in the first place.

According to this early detection and prevention approach, our goal is to further develop the knowledge about characteristics of pupils with EBD, characteristics of their educational situations, and the possibilities to improve these educational characteristics in practice, to promote the functioning of these pupils (also see Prosser, 2008). Theoretically, we assume that three sets of educational conditions are important to enable desired effects on pupils. These sets concern (1) the instructional and social-emotional school environment, (2) the system of detection and intervention in school, and (3) the availability of support for teachers and schools. The research question to be answered is: how do primary schools design the different instructional situations to support pupils with EBD in practice, and how could this design be improved to enhance positive effects on the functioning of pupils with EBD in particular?

**Theory**

*Instructional and social-emotional school environment*

From an instructional point of view, each pupil should be involved in classroom activities that match his or her level of competence (Poulou & Norwich, 2000). Moreover, pupils with EBD have more positive learning experiences when they can assess and manage their own learning (Cooper, 1993). This implies that pupils should be encouraged to take responsibility for their own behaviour and that learners’ self-regulation should be promoted by adequately differentiating instructional conditions (Fletcher-Campbell & Wilkin, 2003). Moreover, social-emotional aspects of the instructional environment can help to prevent or reduce EBD. Such an environment includes a consistent and well-monitored behaviour policy for each
pupil in the social context with other pupils (Daniels et al., 1999). In this respect, Landrum et al. (2003) propose reinforcement, whether positive, differential, or negative, and precise requests as effective EBD interventions. Fletcher-Campbell and Wilkin (2003) advocate clear, unambiguous rules of conduct, continuous positive feedback when pupils follow the rules, and a hierarchy of sanctions for rule-breaking which is made clear to pupils at the outset.

In addition, positive teacher behaviour is a critical factor in enhancing the successful school experiences of EBD pupils (Cartledge & Talbert Johnson, 1996). According to Poulou and Norwich (2000) teachers regard several approaches as effective when addressing EBD pupils, including gaining the child’s confidence, expressing personal interest, and showing supportive behaviour. Foster, Brennan, Biglan, Wang, and al-Ghaith (2002) stressed the importance of limiting opportunities for misbehaviour and reducing environmental stressors. A positive self-image should be promoted and self-confidence encouraged. Pupils should feel that their opinions and beliefs are valued (Groom & Rose, 2004). Opportunities should be created for children to observe and practise interpersonal as well as academic skills. ‘Circle time’ may also contribute to reducing EBD; this involves regular timetabled sessions when teaching groups are given the opportunity to reflect on and share experiences, to discuss issues of concern to the group, and to find solutions for these issues (Fletcher-Campbell & Wilkin, 2003).

**System of detection and intervention**

The system of detection and intervention reflects a second set of educational conditions assumed to be relevant for pupils with EBD (Van der Leij, Kool, & Van der Linde-Kaan, 1998). In The Netherlands, for example, pupils with severe emotional and behavioural disorders may be admitted to or kept in mainstream schools with the support of specialists from special schools. This is an alternative to referring EBD pupils to a special school. In
order to qualify for this support of specialists, these pupils have to meet specific requirements that are assessed by a special committee, with the DSM-IV criteria forming part of the assessment. Since the introduction of this alternative in 2003, the number of EBD pupils in primary school who are diagnosed as meeting these criteria is growing rapidly. In addition to the pupil group referred to here, there is a population of pupils in mainstream primary schools with less severe disorders, including EBD, who are not entitled to additional funding on an individual basis.

An adequate system of detection and treatment or intervention should be set up for EBD pupils, regardless of the detection method and the specific type of school. Such a system may imply features to detect problems, analyse problems, prepare solutions, apply solutions, and evaluate solutions (cf. Van der Leij et al., 1998). Integrated systems for monitoring, evaluation, and administration should be used to link these different aspects. It is customary for schools to use a monitoring system to track the cognitive development of pupils. In addition, a monitoring system that addresses pupils’ socio-emotional development should also be available (Doolaard, Cremers-Van Wees, & Luyten, 2002). The special or mainstream school should also ensure that various key members of staff understand the nature of emotional and behavioural difficulties (Daniels et al., 1999). An individual education plan (IEP) for specific EBD pupils may provide a basis for interventions in the classroom. Alongside cognitive aspects, affective goals can also be set in such plans, e.g., fostering self-confidence, collaboration, or diminishing feelings of depression, as well as goals relating to pupils’ attitude towards school work (Tod, 1999).

Moreover, with respect to intervention, several authors state that children with EBD need direct and systematic instruction in social skills (see, e.g., Cartledge & Talbert Johnson, 1996). Such skills are critical for their ability to interact with, adapt to, and function within the school and wider environment (Chen, 2006). According to Gresham, Elliot and Black (1987)
EBD pupils should be instructed in classroom social skills that are crucial for teacher and peer acceptance. Fekkes (2005) pointed out that social skills training also contributed to making pupils more resistant to bullying by other pupils. Chen (2006) concluded that no best practice model for training in social skills is available and that many programmes do not yield the desired results. Evans, Harden, Thomas and Benefield (2003) reviewed four social skills training programmes that yielded positive effects immediately after training, but showed no long-term effects. In addition, for specific pupils with EBD external treatment may be necessary to complement in-school activities. For example, cognitive behaviour therapy can be an effective treatment for anxiety and depression (Muris, 2005).

Parents should also be involved in the process of detection and intervention. Wolfendale (1992) emphasized the knowledge parents have of their own children. This parental information is of considerable importance to school staff in meeting pupils’ special educational needs from the start of their school career (Mooij, 2000). In addition, parents should be encouraged to provide extra assistance for their child when necessary, to align home and school interventions (Miller, 2003; Mooij, 2000). Weare and Gray (2003) pointed out that the involvement of parents is crucial in effectively addressing behavioural problems in children. This especially applies to children below the age of 13. The involvement of parents is shown to improve children’s level of achievement, acceptability of behaviour, and motivation in school (Rous, Hallam, Grove, Robinson, & Machara, 2003). In addition, Muris (2005) claimed that, if behavioural disorders are detected at an early stage, they can be treated effectively by helping parents acquire child-rearing skills. It is therefore hugely important for professionals like maternity nurses, staff of day-care centres, district nurses, and paediatric doctors to recognize home situations that pose a risk to the development of children. Interventions for primary school pupils should then include a combination of parenting programmes and training in problem-solving skills and communication (Carr, 2000).
Support for teachers and schools

A third set of educational conditions relevant for pupils with EBD is support provided by in-school professionals as well as by external agencies, to adequately prepare special and mainstream schools and teachers for EBD and to assist them to respond to EBD. Teachers’ competencies are crucial with respect to detecting problems and intervening appropriately (Miller, 2003). Teachers need to be trained and assisted in managing aberrant behaviour and helping pupils develop appropriate social behaviours (Cartledge & Talbert Johnson, 1996). In addition, teachers need to be armed with a realistic battery of management skills; they should have a broad range of differentiation strategies at their disposal, as well as an understanding of when these may be most appropriately deployed and most effective (Groom & Rose, 2004).

Moreover, teachers’ attitudes are important in particular when it comes to including pupils with EBD in mainstream classrooms (Cartledge & Talbert Johnson, 1996). Teachers have been found to perceive pupils with EBD as unlikely to be either motivated or capable of making effective decisions about their own learning. Avramidis and Norwich (2002) pointed out that one factor that is consistently associated with more positive attitudes of teachers towards inclusion is the availability of support services at classroom and school levels. This involves both physical support (e.g. resources, teaching materials, ICT equipment, and a restructured physical environment) and human support (e.g. learning support assistants, special teachers, and speech therapists). Maras (2005) emphasized the introduction of multi-agency support, involving multidisciplinary teams and interagency work, in providing effective care to children. Multidisciplinary teams, or youth care advisory teams, can advise school staff and in some cases parents; these teams may provide short-term support to parents or pupils, or they may refer pupils to care organizations (Bosdriesz & Berkenbosch, 2003).
Support by the health care system is perceived by school staff to result in an increase in pupils’ well-being and an improvement in social behaviour (Pettitt, 2003).

**Method**

The research question formulated above first of all requires the specification of how primary schools design and use the different instructional situations to support pupils with EBD. We therefore focus on the daily educational practice of primary schools to gain more insight into concrete aspects and outcomes of learning processes for pupils with EBD. We decided to carry out case studies in mainstream primary schools in five different regions in The Netherlands. These regions were selected by using outcomes of a survey of co-ordinators of clusters of mainstream and special primary schools (Sontag, Van Wolput, & Mensink, 2004). The two criteria used for selecting regions were successful cooperation between schools and youth care institutions in the region, and regional action is focused on possibilities to prevent or intervene with respect to EBD.

The five regions that were selected for the present study include two cities of 600,000 and 750,000 inhabitants respectively, a town of about 70,000 inhabitants (including several smaller surrounding communities), and two more rural areas. The latter are characterized by towns of 30,000 to 40,000 inhabitants and some surrounding villages. In the five regions of mainstream and special primary schools, the number of schools per cluster ranges from 22 to 108. Information provided by the school cluster co-ordinator was used to select the primary schools in these regions. The schools selected were thus known to be actively engaged in dealing with pupils with EBD, and also to improve their social and cognitive learning processes and outcomes. The final result was that 12 mainstream schools were willing to collaborate.
In each of the case studies, face-to-face interviews were conducted with the school cluster co-ordinators, the special educational needs co-ordinators (SENCOS), and persons involved in the co-operation between schools and youth care institutions. All in all, 35 professionals were interviewed. Two researchers conducted the interviews. For budgetary reasons, each interview was carried out by only one interviewer. In addition, the researchers studied relevant documents of the schools and their support of EBD pupils. In the semi-structured interviews with the SENCOS, the following aspects were addressed: the prevalence of the EBD problem at the school; the school’s policy on detection and intervention and related activities; the facilities and support available at the school; and the support from and cooperation with institutions outside the school. The interviews with cluster co-ordinators and representatives from youth care and other institutions focused on the regional support for schools, specific policy and actions aimed at EBD intervention and prevention, and cooperation between the agencies and local authorities involved.

We will first present a summary of the findings with respect to the semi-structured interviews held with the SENCOS about the prevalence of the EBD problem. Then we will give more detailed information per school by ordering research outcomes according to the three issues addressed in the theory section.

Results

*Prevalence of EBD problem in mainstream primary schools*

A main finding is that, in large cities, the schools have a large population of disadvantaged pupils from ethnic minority groups. In towns and rural areas, school populations are usually more varied, with fewer pupils from ethnic minority groups and, in some cases, a considerable number of disadvantaged pupils of Dutch origin. These are pupils with low-educated parents.
The percentage of disadvantaged pupils from ethnic minority groups in the schools covered in the present study ranges from 0 to 94, whereas the percentage of disadvantaged pupils of Dutch origin ranges from 0 to 32.

According to the SENCOs, the problem of EBD varies among the schools involved. In some of the 12 schools, the SENCOs feel EBD does not pose a significant problem, whereas in one of the schools approximately one-third of the pupil population has some kind of disorder, often including some category of EBD. Estimates of the number of pupils with EBD in the schools range from two to six per group of 25 to 30 pupils. Various types of disorder were listed by the SENCOs, including autism, attention-deficit/hyperactivity disorder, fear of failure, depression, lack of social skills, and insufficient attention to tasks. Difficult home circumstances were mentioned as well, perhaps involving emotional neglect and/or maltreatment.

**Instructional and social-emotional school environment**

In most of the 12 schools the school’s SENCO did not mention any special instructional activities to manage or prevent EBD. Table 1 presents a list of the school-specific results. Two of these 12 schools perceived adaptive instruction to be an important element in dealing with EBD. In one of these two schools, the year group system was considered to be inadequate and the school had begun to experiment with differentiating the composition of classes into smaller groups of pupils. Cooperative learning, including a tutoring system, was perceived by some of the schools to be beneficial in the management of EBD. Schools with a majority of pupils from disadvantaged or minority groups found that focussing on direct instruction and providing a lot of structure helped to manage or prevent EBD. A number of SENCOs stated that improvements were needed in teachers’ classroom management.
The focus at most of the schools was on the social-emotional environment, including the enforcement of rules (see Table 1). In their interviews, the SENCOs stated that providing an adequate social-emotional environment was an important aspect of EBD intervention. Examples given were circle time, encouraging cooperative learning, emphasizing the importance of mutual respect, reaching agreement about the pupil’s attention to a task, and rewarding good behaviour. Other factors mentioned were the importance of providing a lot of structure as well as a predictable environment. Half of the schools have a method or programme aimed at social-emotional development at their disposal, but they scarcely use it in a structured way. The SENCOs of the schools say that using these methods takes up too much time and that social-emotional aspects are not dealt with coherently enough. Most schools have adopted fixed rules of conduct. Half the schools use a conduct protocol and/or a protocol against bullying. Several schools emphasized that a consistent approach by the whole team is needed to prevent and manage EBD.

System of detection and intervention

EBD is detected both systematically and spontaneously, by observing pupils’ behaviour in particular (see Table 2). The systematic approach is used in eight out of 12 schools. It involves using questionnaires exploring the social-emotional characteristics of the pupils and/or sociograms that represent the class relationships and social processes between pupils. The questionnaires and sociograms are processed by the teachers. The teacher and the SENCO discuss those pupils whose scores are below a specified limit. If additional advice is needed, it can be obtained from parties outside the school, such as the school counsellor, a special education counsellor, a multidisciplinary team, or a youth care advisory team. Where
appropriate, an individual education plan (IEP) is drawn up. However, contrary to the approach to cognitive learning disorders, schools are not accustomed to using IEPs in connection with the social-emotional development of pupils. Furthermore, schools do monitor the social-emotional development of pupils throughout their school career. In general, SENCOs themselves are satisfied with the teachers’ competency to prevent, detect and manage EBD, but some SENCOs also say that competencies vary. According to a number of SENCOs, a more systematic and joint approach to EBD would be necessary. In addition, some SENCOs state that teachers could do with more background knowledge on pupils’ social-emotional development: see Table 2.

Insert Table 2 about here

The schools are aware of the importance of involving parents with respect to EBD. As a result, they schedule talks with parents on a regular basis, especially when the child has EBD (see Table 2). In addition, several schools provide information and advice to parents and try to boost parent involvement in the school. However, the SENCOs interviewed said that parents were not consulted systematically in order to survey possible EBD characteristics when their children first entered school.

Support for teachers and schools

Teachers are supported by a SENCO at all 12 mainstream schools. Most schools also have remedial teachers at their disposal (see Table 3). Eight schools have support assistants or support teachers. In addition, support from outside the school is available, mainly from school counsellors related to school support services, and special education teachers. In some regions, school social workers are also available to provide support in the schools.
All the schools surveyed can call in support from specialists at special primary schools in their cluster to assist pupils with mild learning and behavioural disorders, and from specialists at special schools to help pupils with severe disorders. Schools feel there is a certain degree of overlap between the services and advice provided by these external specialists. In addition, schools often call in the help of the school support service when they are seeking advice on how to manage pupils with EBD. Other types of support vary from region to region and from place to place. Table 3 provides a list of the support available in the five regions studied. This support mainly consists of youth care advisory teams that are available for consultation. Typically, a youth care advisory team consists of representatives from youth care, youth health care, a remedial educationalist from a school support service, and the school’s SENCO. Another type of support for mainstream schools comes from a school social worker, who may act as a liaison between the school and youth care agencies and between the school and parents. Schools appreciate the support they get from these parties.

Social skills training is also available in a number of schools. In some cases the training is provided in school, whereas in other cases it is provided elsewhere. The training is usually provided by specialists from external agencies. It may be financed by local government, by the school cluster, or by the school. According to most SENCOs, social skills training makes an important contribution to intervening in and possibly preventing EBD. Some of the pupils with EBD require treatment by youth care agencies. They may be referred to the proper agency by a youth care advisory team, if present, or by the Youth Care Office which provides access to the second-line care system. Schools see youth care as an entangled,
constantly changing system. In addition, waiting lists are a common problem in youth care, and privacy considerations mean that schools receive little or no information about treatment. As a result, they often feel inadequately supported by youth care when pupils need external treatment.

Improving instructional and learning processes

The second part of the research question asked for potential improvements of primary schools in order to enhance positive effects on the functioning of pupils with EBD in particular. In answering this part we first concentrate on what the schools themselves revealed or reported.

The 12 case studies show that types and prevalence percentages of EBD vary considerably between the primary schools. Eight schools used a systematic approach to detecting EBD, consisting of questionnaires and/or sociograms processed by teachers. With respect to treatment for EBD, schools often did not have a systematic approach. They were not accustomed to using individual education plans for pupils with EBD. Instead, they often carried out specific activities or interventions on an ad-hoc basis. A number of schools emphasized direct instruction and providing a lot of structure as well as creating a predictable environment for pupils. Some of the schools perceived adaptive instruction and cooperative learning to be beneficial in managing or preventing EBD. Most of the schools clearly focussed on social-emotional instruction and learning, not on cognitive goals or competencies. Although schools recognized the importance of involving the parents when a child has EBD, they did not go about using parents’ knowledge of their own child systematically. Teachers were supported by a special educational needs co-ordinator and by remedial teachers, support assistants, or support teachers. Additional support was given by specialists from several types of special schools, as well as by school support or youth care or health services. However,
overlap existed between the activities and advice provided by these specialists. In general, schools felt inadequately supported by youth care.

This research information about pupils with EBD in mainstream schools does not differ much from research outcomes on pupils with EBD in special education obtained some 20 years ago (Doornbos & Stevens, 1987). It therefore seems that a more systematic, effective approach and corresponding support are needed to improve the instructional and learning processes of pupils with EBD in practice. Some design aspects can be mentioned here. First, a more consistent architecture of diagnostic and related instructional and learning concepts, procedures, and materials should be made available and checked for desired effects with pupils before being implemented on a large scale. Social, general cognitive, language, arithmetic and sensory-motor competencies should be included in this architecture, with integration of diagnostic or evaluation measures and IEPs where possible or relevant. This architecture should be aligned to the most important curriculum and organizational characteristics and processes in school. Collaboration within school, between schools and parents, between schools, and between schools and external specialists, can be then promoted, in particular by using adequately designed Information and Communication Technology (ICT). Improvement in social, cognitive, or other learning with specific pupils can then be achieved by various strategies, e.g., screening of the pupils’ entry characteristics by both parents and teachers, promotion of prosocial processes between pupils and between pupils and teachers, and evaluation of these various processes in individual and group-based ways, use of prepared differentiated instructional and learning procedures including relevant diagnostics and IEPs, concentration of teacher attention on those pupils who need this most, and so on (cf. Foster et al., 2002; Mooij & Smeets, 1999).

Mooij (2002) integrated these issues into a systematic design for improving educational practice for pupils, teachers, and parents in responsible and measurable ways. Systemic
improvements were introduced in the form of preventive screening or diagnostics and the consequent instructional differentiation at multiple levels, to match the various learning characteristics of the pupils actually present in class. Learning was then organized more individually or, preferably, in small groups of collaborative learners. Mooij (2004) extended this design to include an overall hierarchical structure of competence domains characterized by criterion-based and norm-based tasks and learning activities, to assess associated educational levels of competency. ICT was developed and tested to integrate and support general but also individual or group-oriented pedagogical-didactic information, flexible grouping of pupils, and adequate handling of instruction and learning in some primary schools (see Mooij & Smeets, 2006). The web-based ICT prototype includes the parents’ and teachers’ screening of the pupils’ entry characteristics and a diagnostic social-emotional behaviour test which can be used throughout nursery and elementary education (cf. Panayiotopoulos & Kerfoot, 2007). The prototype can store information that can also be accessed by agencies outside school, thus making it possible to improve information-sharing about pupil diagnostics, treatment, and learning improvement by teachers, parents, and youth care agencies.

**Discussion**

Pupils with EBD problems vary in many respects, which asks for a comprehensive but differentiating approach in detection, treatment, and evaluation of social and cognitive learning processes and effects. The support has to be available at multiple levels, either in special or mainstream education, or in both. Realization of adequate support should be a matter of design and adequate empirical evaluation of learning processes and effects in educational situations that have been compared statistically, instead of being based on
ideologies and utopias (Croll & Moses, 2000). From this empirical or evidence-based point of view, the available research and the 12 case studies reported in this study clarify that much remains to be done for individual pupils, classes, and schools. For example, specific conditions have to be fulfilled in schools in order to detect EBD individually at a very early stage, provide responsible treatment to EBD pupils individually or in groups, evaluate the process characteristics and effects of treatment measures or IEPs appropriately, and reduce or prevent the disruption EBD pupils cause in the classroom.

All this is important also to prevent EBD problems from developing or becoming more serious in school because of inadequate or not-fitting instructional characteristics. The results from the 12 Dutch case studies show that mainstream and special schools, and special education and youth care professionals, do not usually recognize or design systematically differentiating instructional and learning characteristics that would benefit both pupils with EBD and teachers alike. In schools, more emphasis should be placed on the relation between diagnostic or detection and curricular or IEP aspects, and more assistance should be given to aid schools in developing and implementing such systematic characteristics in and between schools. As referred to above, adequate ICT can be of much support here (cf. Mooij, 2007).

Furthermore, as most of the mainstream schools focus on the social-emotional problems and the relevant instructional environment, a systematic approach as suggested above can encourage teachers and pupils to concentrate also on competencies in cognitive learning areas. Given that the EBD problems vary as they do, it can be expected that cognitive competences vary to about the same degree. Research is needed to assess both social-emotional and cognitive variation of pupils and the characteristics of instructional designs to improve the different learning characteristics effectively. As indicated, parents can be involved at a very early stage to effectively address and probably reduce social-emotional, cognitive, or behavioural problems in their children.
The systematic approach as sketched needs further specification and implementation in schools for special education, or mainstream schools. Empirical research can clarify which specifications and instructional features are most effective for which types of pupils with EBD problems. A general pedagogical-didactic structure and relevant ICT can also aid the structure and support various types of learning activities in and between various types of schools, to deal adequately with EBD. Such an approach creates more educational opportunities than before for pupils with EBD problems, to realize improvements in areas that certainly need extra attention.

Authors’ Biographies

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## Table 1 – Instructional and social-emotional school environment

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<th>School 4</th>
<th>School 5</th>
<th>School 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>The instructional environment</td>
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<td>The instructional environment</td>
</tr>
<tr>
<td>Jenaplan system; 2-year combination groups and separate instruction groups; focus on cooperative learning; additional group activities for gifted pupils</td>
<td>Jenaplan system; 3-year combination groups and separate instruction groups; focus on cooperative learning</td>
<td>focus on autonomous learning; additional instruction if necessary; gifted pupils also receive attention</td>
<td>joint instruction, followed by autonomous learning with additional support from the teacher</td>
<td>focus on adaptive instruction; experiments in pupil grouping; exploring the possibility of abolishing the year group system</td>
<td>providing adaptive instruction is a starting-point for reducing EBD</td>
</tr>
<tr>
<td>The social-emotional environment</td>
<td>The social-emotional environment</td>
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<td>The social-emotional environment</td>
</tr>
<tr>
<td>emphasis on the social-emotional environment; circle time; teacher-pupil interaction; fiduciary pupils; rules of conduct</td>
<td>heavy emphasis on the social-emotional environment; circle time; cooperation</td>
<td>continuous emphasis on the social-emotional environment; fixed rules of conduct; protocol against bullying; agreement about a consistent approach by the team</td>
<td>focus on a structured environment; detailed rules of conduct have been abolished; protocol against bullying, signed by the pupils</td>
<td>trying to achieve a consistent approach by the team</td>
<td>starting point is that pupils should feel safe; emphasis on rules of conduct mainly after incidents</td>
</tr>
</tbody>
</table>

27
<table>
<thead>
<tr>
<th>The instructional environment</th>
<th>focus on structured working with teaching methods; many activities aimed at reading ability; often co-teaching</th>
<th>focus on whole-class instruction; providing a structured environment; step by step instruction</th>
<th>teaching methods are guiding; instruction becomes more adaptive, depending on the teacher</th>
<th>working towards a predictable environment</th>
<th>Montessori system; focus on autonomous and self-responsible learning</th>
<th>no special emphasis on the instructional environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>The social-emotional environment</td>
<td>providing a structured environment; clear rules of conduct; dealing with bullying; use of additional play materials; rewards for good behaviour</td>
<td>clear rules of conduct; providing clarity; focus on respect and safety; protocol against bullying; rewards for desired behaviour</td>
<td>protocol of desired behaviour; pupils sign this and point out the rules to each other; additional play materials</td>
<td>a limited number of rules (2 ‘golden rules’); task play with rewards and penalties; working towards ‘calmness, order, and orderliness’; emphasizing positive aspects</td>
<td>rules of conduct for pupils and for parents; protocol against bullying; working to achieve the right ‘climate’ at the start of the school year; peer tutoring system for pupils</td>
<td>open climate; many rules of conduct for pupils as well as parents; protocol against bullying</td>
</tr>
<tr>
<td>Detection of EBD</td>
<td>School 1</td>
<td>School 2</td>
<td>School 3</td>
<td>School 4</td>
<td>School 5</td>
<td>School 6</td>
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</tr>
<tr>
<td><strong>School 1</strong></td>
<td>observation by the teacher; consultation of SENCO or external specialists by teacher</td>
<td>heavy emphasis on systematic observation in early years; consultation of SENCO or colleagues by teacher</td>
<td>use of a conduct assessment instrument and sociograms, twice a year; observation; consultation with SENCO and colleagues</td>
<td>processing of sociograms, twice a year; teacher and SENCO discuss all pupils twice a year</td>
<td>detection by teacher; use of two conduct assessment instruments; observation in classroom by SENCO</td>
<td>detection by teacher; observation in classroom by SENCO; approach should be more systematic and more in collaboration</td>
</tr>
<tr>
<td><strong>School 2</strong></td>
<td>very few IEPs in the event of EBD because it is difficult to put IEPs into practice</td>
<td>few IEPs, since teachers set other priorities; according to the SENCO more systematic interventions are required</td>
<td>IEPs may be drawn up by the school support service, based on the observation of pupils</td>
<td>IEPs for EBD are often applied when there are learning difficulties; in addition, group education plans may be used</td>
<td>4 kinds of IEPs are used, among which is the IEP aimed at social-emotional development</td>
<td>IEPs are used in case of EBD; in early years, focus is on solutions, in later years focus is on control</td>
</tr>
<tr>
<td><strong>School 3</strong></td>
<td>when necessary, social skills training may be provided by Youth Care</td>
<td>a social skills training pilot project is financed by the local authorities</td>
<td>social skills training is available for pupils at risk; training is conducted by 2 teachers</td>
<td>social skills training is available through the cluster of schools</td>
<td>sometimes pupils are referred to external social skills training, paid for by parents</td>
<td>no social skills training is available, but such training is needed</td>
</tr>
<tr>
<td><strong>School 4</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>School 5</strong></td>
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</tr>
<tr>
<td><strong>School 6</strong></td>
<td></td>
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</tr>
<tr>
<td>Involving parents</td>
<td>the school has a lot of contact with parents</td>
<td>great emphasis on the socio-emotional development in reports to parents</td>
<td>parental involvement is a special theme this school year</td>
<td>the school tries to get parents involved</td>
<td>in case of EBD, the school tries to get parents to admit the problem and to involve themselves in finding a solution</td>
<td>at the start of the school year there is a short talk with parents about the social-emotional development of their child</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Detection of EBD</th>
<th>School 7</th>
<th>School 8</th>
<th>School 9</th>
<th>School 10</th>
<th>School 11</th>
<th>School 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>a conduct assessment instrument is used occasionally; consultation of colleagues</td>
<td>conduct assessment instrument used twice a year; consultation with SENCO; specialist teacher may advise</td>
<td>conduct assessment developed by the school used 3 times a year; discussion of pupils 6 times a year</td>
<td>several conduct assessment instruments used; consultation with SENCO</td>
<td>several conduct assessment instruments used; consultation with SENCO</td>
<td>conduct assessment instruments used; discussion of all pupils with SENCO (4 times a year); pupil questionnaires</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intervention of EBD</th>
<th>School 7</th>
<th>School 8</th>
<th>School 9</th>
<th>School 10</th>
<th>School 11</th>
<th>School 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>occasional use of IEPs in cases of EBD; focus on managing the problem by the teacher social skills training available for higher year groups</td>
<td>use of IEP depends on the problem and the teacher</td>
<td>no IEPs in cases of EBD</td>
<td>no IEPs in cases of EBD</td>
<td>IEPs are used in cases of EBD, but this is difficult for the team</td>
<td>occasionally IEPs are used in cases of EBD</td>
<td></td>
</tr>
<tr>
<td>social skills training has been abolished</td>
<td>social skills training has not yet available</td>
<td>social skills training not yet available</td>
<td>social skills training provided by special education teacher</td>
<td>sometimes pupils are referred to external social skills training</td>
<td>sometimes pupils are referred to youth care for social skills training</td>
<td></td>
</tr>
<tr>
<td>Involving parents</td>
<td>frequent consultation of parents in cases of EBD</td>
<td>in case of incidents, parents are contacted; parents can ask for advice</td>
<td>in case of incidents, parents are contacted; thematic meetings</td>
<td>frequent consultation of parents in cases of EBD</td>
<td>parents are involved in interventions; thematic meetings</td>
<td>a lot of emphasis on involving parents, with success</td>
</tr>
</tbody>
</table>
### Table 3 – Support for teachers and schools

<table>
<thead>
<tr>
<th>School 1</th>
<th>School 2</th>
<th>School 3</th>
<th>School 4</th>
<th>School 5</th>
<th>School 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Support by school staff</strong></td>
<td><strong>Support by external specialists</strong></td>
<td><strong>Support by school staff</strong></td>
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<td><strong>Support by external specialists</strong></td>
</tr>
<tr>
<td>1 SENCO; 1 teacher for additional activities for gifted pupils; 1 teacher who supports activities in small groups; remedial teaching</td>
<td>teacher support by the cluster of schools, special education, and the school support service; school social work; youth care advisory team</td>
<td>SENO and remedial teacher; teaching assistants, especially in year groups 1-4</td>
<td>teacher support by the cluster of schools, special education, and the school support service</td>
<td>limited support by special primary schools; limited support by special education; limited support by school support service; school social work</td>
<td>close cooperation between the cluster of schools and the school support service; teacher support by the cluster of schools and limited support by special education; school social work</td>
</tr>
<tr>
<td>2 SENCOs, 1 of whom is also a remedial teacher; 1 teaching assistant; 1 additional teacher for reading instruction in year groups 3 and 4</td>
<td>teacher support by the cluster of schools, special education, and the school support service; school social work; youth care advisory team</td>
<td>SENO and remedial teacher; teaching assistants, especially in year groups 1-4</td>
<td>teacher support by the cluster of schools, special education, and the school support service</td>
<td>limited support by special primary schools; limited support by special education; limited support by school support service; school social work</td>
<td>close cooperation between the cluster of schools and the school support service; teacher support by the cluster of schools and limited support by special education; school social work</td>
</tr>
<tr>
<td>2 SENCOs; no remedial teaching outside of the classroom</td>
<td></td>
<td>2 SENCOs; no remedial teaching outside of the classroom</td>
<td>2 SENCOs; remedial teaching only for SEN pupils; additional student teachers are available in early year groups</td>
<td>2 SENCOs; remedial teaching only for SEN pupils; additional student teachers are available in early year groups</td>
<td>2 SENCOs; remedial teacher; student teachers</td>
</tr>
</tbody>
</table>

School 7 | School 8 | School 9 | School 10 | School 11 | School 12 |
<table>
<thead>
<tr>
<th>Support by school staff</th>
<th>2 SENCOs; remedial teacher ('co-teaching'); there are often 2 teachers per group; 1 co-ordinator of reading skills</th>
<th>3 SENCOs; remedial teacher; teaching assistants in early year groups</th>
<th>SENCO; remedial teacher; teaching assistants in year groups 1-2</th>
<th>2 SENCOs; 3 teaching assistants; some additional support by teachers</th>
<th>2 SENCOs; 1 teaching assistant; remedial teaching by the teacher in the classroom</th>
<th>1 SENCO; 1 remedial teacher; additional support teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support by external specialists</td>
<td>support by school support service or specialist from cluster of schools; support from special education; school social work</td>
<td>support by school support service or specialist from cluster of schools; support from special education; school social work</td>
<td>support by school support service or specialist from cluster of schools; support from special education; school social work</td>
<td>school may acquire support from special primary school in advance; support from special education; school social work; youth care advisory team</td>
<td>school may acquire support from special primary school in advance; support from special education; school social work; youth care advisory team</td>
<td>school may acquire support from special primary school in advance; support from special education; school social work; youth care advisory team</td>
</tr>
</tbody>
</table>