



Pergamon

Journal of School Psychology  
42 (2004) 87–92

Journal of  
School  
Psychology

Manual review

## Review of brainSTARS—brain injury: strategies for teams and reeducation for students<sup>☆</sup>

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Received 20 November 2003; accepted 20 November 2003

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When a child experiences a brain injury, the effects can be devastating for the child, family, and the child's school. In many cases, parents, teachers, and administrators will depend upon the school psychologist to fill many roles as the child attempts to reintegrate back into the school system. School psychologists may be expected to facilitate transitions between the home and medical facilities as well as between the home and the school. Additionally, school psychologists may be relied upon to educate parents, teachers, and administrators of the consequences of a brain injury, as well as to design interventions to facilitate reentry into the classroom and ease academic, cognitive, social, and emotional difficulties. BrainSTARS—Brain Injury: Strategies for Teams and Reeducation for Students (Dise-Lewis, Calvery, & Lewis, 2002) can assist school psychologists with the daunting task of preparing schools and families to cope with a child with a brain injury. This manual was designed to support parents and school personnel by providing a comprehensive manual that encompasses many aspects of brain injury in children. The authors review background information about brain injuries, child neurodevelopment, abilities affected by brain injuries, provide strategies and approaches to intervention, and discuss obtaining help in the community to assist children with brain injuries. This comprehensive, easy to read manual is an excellent resource for parents and teachers who have a child who has incurred a brain injury. School psychologists will benefit from this manual in that many practical interventions are provided that target domains that can be impaired by a brain injury, although school psychologists who are very familiar with the nuances of brain injury and neuropsychology may find some elements of the manual to be introductory in content.

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<sup>☆</sup> Dise-Lewis, J.E., Calvery, M.L., & Lewis, H.C. (2002). BrainSTARS—Brain Injury: Strategies for Teams and Reeducation for Students. Denver, CO: Jeanne Dise-Lewis, PhD.

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It appears that the authors envisioned their manual serving a myriad of purposes, and would be read and used by parents, school personnel, psychologists, and other professionals. However, in many cases, the manual appears to speak directly to parents, often in a comforting tone. For example, on page four, there is an acknowledgement to parents of a child who has sustained a brain injury that they will be facing a difficult emotional challenge. There is a deliberate effort by the authors to avoid complicated language, technical terms, and medical jargon. In situations in which it is necessary to use unfamiliar vocabulary, the authors ensure that the term is clearly defined. Parents, teachers, and professionals unfamiliar with neuropsychological terms will find other aspects of the manual to be extremely user friendly. The manual utilizes different colors, bold type to emphasize important aspects and new terms, and a very useful color-coded series of tabs that enable the reader to quickly find the necessary section. Additionally, throughout the text there are reminders, hints, guidelines, and definitions in the margin that reinforce points made in the manual. Overall, the reader is presented with the feeling that they have read a user-friendly guidebook to brain injury rather than a complicated, dry, and theoretical textbook.

BrainSTARS—Brain Injury: Strategies for Teams and Reeducation for Students (Disel-Lewis, Calvery, & Lewis, 2002) is broadly divided into three sections. The first section of the manual, Acquired Brain Injury in Children and Adolescents, offers the reader a wide array of information about brain injuries including potential causes, domains affected by brain injury, and neurodevelopmental stages as they relate to brain injury. This section of the manual will be particularly useful for individuals who are looking for a general introduction to how children can be affected by brain injuries. Pragmatic suggestions and common concerns are discussed regarding how to handle the days immediately following a brain injury including nutrition issues, how to ask questions, fatigue, recovery of cognitive skills, and resumption of activities.

Of particular interest to school psychologists will be Chapter 3, Abilities Typically Affected by Brain Injury. Often, school psychologists will be unaware of the myriad of cognitive, personality, sensory, motor, and emotional changes that a child can experience as a result of a brain injury. Further complicating the issue, there is not a unique profile of abilities that are uniformly lost or altered; rather, every child who experiences a brain injury will experience different levels and areas of impairment. The manual reviews some possible changes that a child may experience as a result of brain injury including sensory changes, motor skills, speech and language abilities, memory, new learning, executive processes, personal development, and social relationships. Akin to the rest of the manual, the wording is expressed in a very basic and direct manner that provides answers to a host of potential questions by parents and teachers. Coupled with each possible area of weakness are suggestions, some of which school psychologists may not find in other texts. For example, there is the possibility that a child may have their taste and smell affected, and parents will have to monitor the use of salts and flavoring to avoid overuse.

One of the most upsetting changes that families report when a child experiences a brain injury is a change in the child's personality (Davis, D'Amato, & Prentiss, 2001). Children who previously followed family rules and norms may now no longer be able to do so. Additionally, children with a brain injury may feel left out of the family unit and socially isolated, as they are no longer able to participate in sports or other social activities at home

and at school. The manual competently addresses these potential changes including relationships at home and with peers at school. However, in this section, it would be helpful to have more information devoted to potential problems with depression, anxiety, or other mental disorders that can arise after a child suffers a brain injury.

School psychologists will be pleased with Chapter 4, *Developmental Stages*, as this section can be used as a stand-alone review of developmental changes, along with the intended purpose of reviewing the effects of brain injury at different stages of development. Problems that may arise as a result of a brain injury are framed to help parents and teachers interpret these difficulties and are supported with a series of excellent clinical vignettes. Each vignette presents an example of a child at each developmental stage and discusses problems and potential solutions that may arise at each developmental level. The vignettes may be comforting to parents, as some vignettes illustrate some mistakes parents of children with brain injuries often make as they attempt to cope with the negative effects of a brain injury on their child's life. At the end of this section is a useful reference that lists developmental achievements, effects of brain injury at that stage, and some suggested interventions.

It is likely that school psychologists will find the second section of the book, *Approaches to Problems and Strategies for Intervention*, to be the most helpful. This section of the book outlines general and specific recommendations for helping children overcome specific deficits or weaknesses in particular domain areas. Underlying the recommendations is an approach that focuses on using normal life experiences that are part of a child's normal routine. The authors explain that this approach will help children experience competency in activities that are important, meaningful, and akin to activities in which their peers are engaged. Additionally, children are likely to be more motivated to complete tasks if they are important to their life. Using real life daily activities in designing interventions is an important approach that school psychologists should employ as often as possible, as interventions that take place in an artificial environment are more difficult to generalize to the classroom.

Preceding the list of interventions and recommendations is a review of the A (Antecedents)–B (Behavior)–C (Consequences) model of behavior change. Although this will be familiar information to most school psychologists, this section will be helpful to uninitiated parents and teachers to help them recognize and identify behavior problems, identify antecedents, and design well-constructed behavioral interventions. Of particular utility is a series of pragmatic suggestions for designing successful behavior change models, such as structuring the physical environment, organizing desk space, using visual cues, using schedules, modeling skills and behaviors, and implementing successful rewards. Although these are particularly important considerations for children with brain injuries, this section will also be helpful for children with other disabilities such as learning disabilities, emotional problems, or attention related problems.

Chapter 7, *Problem-Solving Index, Neurodevelopmental Clusters, and Interventions*, is the most valuable part of the manual, and this manual is recommended to school psychologists based solely on this section. Four color-coded sections represent four broad domains of a child's functioning, *Daily Life, Emotions and Social Relationships, Language, and School*. Under each section, there is an extremely comprehensive list of

problems that children with brain injuries may experience that have been identified by parents and teachers. For example, in the School section, there are multiple problems listed under Assignments, Attention, Grades and Tests, Learning Pace, Math and Reading, and some others. For each problem, the reader is directed to one of 21 numbered tabs. Each numbered tab represents a specific neurodevelopmental ability that may have been impaired as a result of a brain injury. When the reader turns to a tab, they are presented with a definition of the neurodevelopmental activity, followed by a “neurodevelopmental cluster”, which represents the additional problems a child may be experiencing as a result of a disruption of that particular neurodevelopmental ability. These neurodevelopmental clusters reflect the research and practical experience that underlies the construction of this manual. These additional problem areas will direct parents, teachers, and school psychologists to investigate areas of difficulty that may have escaped their attention. For example, under the neurodevelopmental cluster of Nonverbal Learning, additional problems such as “doesn’t get jokes” “has a poor sense of time”, and “ignores social cues” are some of the additional problems listed. All of the preceding difficulties may be unnoticed in light of other severe problems, but each could greatly contribute to academic, social and emotional difficulties.

In addition to the helpful neurodevelopmental clusters, there are lists of intervention following each neurodevelopmental activity. Each section directs the reader towards interventions that “use everyday activities”, interventions that “set the stage for success”, and “teach new skills”. The interventions are calculated, practical suggestions that offer specific goals and ideas for parents and teachers. For example, under the Planning neurodevelopmental activity, the authors suggest that parents and teachers, “Set the expectation that your child will be involved in at least one activity with a friend each weekend. Brainstorm possible choices of activities, places, and friends. Provide as much support as your child needs to follow through on her plan” (p. 215) and “For long range projects, teach your child to use a large planning calendar. Start from the due date and backward-chain the steps necessary to have the project completed on time” (p. 216). The thoroughness of these interventions will assist the child with a brain injury compensate for difficulties at home, at school, and in the community.

The third and final section of the manual, *Mobilizing Community Resources: Getting the Help You Need*, focuses on information that parents and teachers will need to have in order to cope with having a child with a brain injury. Children who have incurred brain injuries often need to navigate through multiple settings, where a preponderance of information may be presented in difficult fashion. Additionally, parents may simply feel overwhelmed by the responsibility of caring for their child with a brain injury. In these cases, community and national resources are available to assist parents and children. The third section of the text covers these community and national resources that are available, as well as relevant educational and legal rights of children with brain injuries and their families. Many supportive resources and contact information are provided including parent support groups, advocacy groups, legal assistance, and financial assistance.

Although most school psychologists are intimately familiar with special education laws, such as the Individuals with Disabilities Act (IDEA), families usually have only cursory awareness of these laws and how they relate to their children. Children with brain

injuries can be served in the schools under different special education criteria such as Traumatic Brain Injured or Other Health Impaired. Regardless of under which special education category a child with a brain injury is served, the child will need an Individualized Education Plan (IEP), or in some cases a child will be served under Section 504 of the Rehabilitation Act of 1973. The manual provides an explanation of IEPs, 504s, and for children 3 and under, Individualized Family Service Plans (IFSP). Additionally, the manual provides information that will help guide the parent through the IEP process including understanding cognitive testing. At the end of this section, the authors provide a comprehensive list of additional resources, a glossary, and worksheets to help parents use the manual, solve behavioral problems, and help design IEPs.

This outstanding informative manual would be a welcome addition to any school psychologists who have a child with a brain injury in their schools. However, it is necessary to recognize some of the limitations of this text as it relates to the field of school psychology. The text does not purport to be a comprehensive technical manual of neuropsychology, neuropsychological assessment, special education law, or the neurophysiology of brain injury. Thus, it is important for school psychologists who consider purchasing this manual to recognize that they were not likely the primary target audience of the authors. The manual speaks very clearly to parents and teachers, and in some cases much of the information will not be new to school psychologists, especially those with a background in neuropsychology. This manual will not help school psychologists use profile analysis or any other techniques to diagnose brain injury, but rather will be most helpful in providing suggestions and interventions that can be used in designing IEPs and behavior plans. With these limitations in mind, school psychologists should not use this manual as a solitary or unitary text to learn more about the neuropsychology of brain injury. More comprehensive neuropsychology and brain injury texts exist that are designed for psychologists, such as [Lezak \(1995\)](#) or [Semrud-Clikeman \(2001\)](#). Another minor limitation of this manual for school psychologists is that this manual will not provide in-depth information about the prevention of brain injuries. Preventing brain injuries and other disorders should be one of the primary goals of school psychologists, and children who have had one brain injury are more likely to sustain a second. Additionally, school psychologists should be aware of risk factors that can lead to brain injuries.

Despite the above referenced slight limitations, this manual would still serve as an outstanding text for school psychologists to have at their disposal. The time when a parent discovers that their child has a brain injury can be confusing and overwhelming, and in some cases, the family will not be equipped to solely handle the many responsibilities of helping the child. Families may depend upon school psychologists to help facilitate multiple transitions, including from the medical setting to the home, the home to the school, the home to the community, and the school to the medical setting. Additionally, school districts may look towards the school psychologist as “the expert” in brain injury, and *BrainSTARS—Brain Injury: Strategies for Teams and Reeducation for Students* will help school psychologists design IEPs, provide parents with resources, ease the teacher’s responsibility in the classroom, and help advocate for the child. For these reasons, along with the overall list of resources and suggestions that can be generalized to children with other disabilities, it is suggested that this manual be a companion for school psychologists.

## References

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