FACTORS ASSOCIATED WITH THE SUCCESSFUL GRADE-TO-GRADE TRANSITION AND GRADUATION OF HIGH SCHOOL STUDENTS IDENTIFIED WITH “BEHAVIOURAL NEEDS OR MENTAL ILLNESS” IN A SUBURBAN BRITISH COLUMBIA SCHOOL DISTRICT

by

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ABSTRACT

Students with emotional and/or behavioural disorders (E/BD) are widely recognized for not doing well in school. In addition to their emotional and/or behavioural disorders, they frequently experience learning difficulties; academic underachievement; poor academic skill levels; course and grade failure; high rates of school noncompletion; as well as poor postschool social, educational, and employment outcomes. These students are widely recognized for being difficult to engage, teach, and maintain in school. In BC, for the 2007-08 school year, only 30% of the students identified with emotional and/or behavioural disorders did successfully graduate from high school with the British Columbia “Dogwood” Certificate of Graduation within six years of first enrolling in Grade 8.

The purpose of this case study was to provide school leaders with an identity construct of the students identified with emotional and/or behavioural disorders in a suburban school district in British Columbia, Canada, so that some factors associated with the successful grade-to-grade transition and graduation of high school students identified with emotional and/or behavioural disorders could be determined. This study first provides a “snapshot” of the 384 students identified with “Behavioural Needs or Mental Illness” in the selected school district on May 30, 2008 from information obtained from the district support services office. It then focuses on the 229 students in high school, from Grades 8-12, who were identified in the “Behavioural Needs or Mental Illness” categories, as these were the grades in which grade-to-grade transition rates declined. The study compares students identified with emotional and/or behavioural disorders in Grades 8-12 who successfully completed their four core subjects (English, a social studies course, a mathematics course, and a science course) at year end, or who successfully graduated with a BC “Dogwood” Certificate of Graduation at year end, with students who did not meet these criteria, in order to establish some factors associated with the successful grade-to-grade transition and graduation of students with emotional and/or behavioural disorders. Factors compared are:

- identification level of the students (“Students Requiring Moderate Behaviour Support or Students with Mental Illness”; and “Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness”);
- gender;
- grade;
- current and historic diagnoses and/or behaviour descriptors;
- current and historic special needs identification(s) including grade(s) identified; length of time identified; and changes in identification(s);
• current living arrangements (e.g., both parents; single parent; grandparent(s), “in care”);
• current educational placement (e.g., alternate school);
• current and historic additional educational support services received (e.g., speech and language, occupational therapy); and
• current and historic community support service(s) received.

The study compares findings from the selected school district with information about children and youth identified with emotional and/or behaviour disorders (E/BD) from elsewhere. From the literature and research findings, recommendations for further study and policy are provided. Recommendations for promising practice interventions are also provided.

**Keywords:** behavior disorders in children; E/BD, emotional behavioural disability, emotional problems of children; high school; integrated case management; school family partnerships; school success; SED; special education; systems of care.
DEDICATION

My father became a high school teacher and principal at age 19 (“19 and a half” he would say) after attending Normal School to become a teacher. The war years had given him the opportunity to start his teaching and administrative career early. After the war, he headed back to university to pursue a graduate degree. Why? “Well,” he would say, “Teaching is like riding a bicycle. When you quit pedaling, you fall off.”

My mother attended Normal School to become an elementary school teacher before settling into marriage and the raising of children. When I was in my twenties, with my first degree in hand, I told my mother that I was going to get married. She congratulated me and then quickly added, “But don’t stop your education.”

To my father and mother, Bill and Lena Unger, I dedicate this thesis. Although they are no longer here to see me walk across stage to receive my doctoral degree, they would be proud to see me carrying on with my learning to improve the practice of teaching.

I also dedicate this thesis to my husband, Sandy, and our children, Greg and Doug. They accepted my quirky schedule of early morning before work studying and my practice of retreating on weekend mornings to my office downstairs. To Greg and Doug, I can do no better than pass on the wisdom of my mother, “But don’t stop your education.”
ACKNOWLEDGEMENTS

First and foremost, I would like to recognize my students over the years who were my inspiration for this thesis. Their challenges to complete school successfully are acknowledged.

Second, I would like to recognize that success in school is a team effort. For each student I taught there were others, including parents, caregivers, school support staff, teachers, school administrators, district student support staff, and community support staff who worked together in collaboration to support student learning. I am forever grateful for the support they gave students and for the conversations we held together that let me know that much still needs to be done to better inform practice and service for students with emotional and/or behavioural challenges.

Third, I owe much to Laurie Meston. Her two questions concerning students identified with “Behavioural needs or Mental Illness” in our school system, “Why are these students not completing high school?” and “What can we do to improve their high school graduation rate?” sent me on an academic journey to find answers in research from questions based in practice.

Fourth, I am grateful for the support, encouragement and wisdom of my supervising and examining committees. Drs. Geoff Madoc-Jones, David Oborne, and David Carter were all I could have asked for from a supervising committee. They were willing to let me trek through literature and analyze research findings until I was satisfied that I had some answers to the questions I had chosen to address. Thank you as well to Drs. Dan Laitsch and Margaret Lipp for their thoughtful comments and questions about my thesis.

Finally, I wish to acknowledge the contributions from my colleagues, both at Simon Fraser University in the Doctor of Education program and at Student Support Services in the district in which I am employed as a school psychologist. I am truly fortunate to have experienced a wonderful community of support.
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**GLOSSARY**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Education Programs</td>
<td>Alternative education programs are those that “meet the special requirements of students who may be unable to adjust to the requirements of regular schools (for example timetables, schedules, or traditional classroom environment)” (BC MoE, website).</td>
</tr>
<tr>
<td>Alternative Schools</td>
<td>Alternative schools in the Sunnyville School District were those schools that served students in high school who were not coping with regular classes due to poor attendance, social/emotional difficulties, or behavioural problems or for students who were teen parents.</td>
</tr>
<tr>
<td>Functional Behaviour Assessment</td>
<td>A functional behaviour assessment is a systematic method of assessing the purpose or “function” of a student’s behaviour in relation to its context so that appropriate interventions can be developed to meet the unique needs of the student.</td>
</tr>
<tr>
<td>Integrated Case Management</td>
<td>Integrated Case Management is a “team approach used for developing coordinated and integrated service plans when there is more than one service provider involved” (Peters, Doig, &amp; Baldwin, 2010, p. 2). It is also a “collaborative community development process in establishing relationships, common understandings and processes among community service providers in order to work together effectively with families receiving more than one service” (Peters et al., p. 2). Integrated case management “puts clients at the centre” “supporting them to identify and achieve their own goals, and direct their own lives to the greatest extent possible” (BC MCFD, 1999, p. 2).</td>
</tr>
</tbody>
</table>
| Neighbourhood Schools Policy | A neighbourhood school is “the school that students would normally attend if they did not have special needs” (BC MoE, website). The Sunnyville neighbourhood schools policy states that schools:  
  - accept all students within their boundaries;  
  - recognize the responsibility to provide an appropriate education to all students, and work together as a team to accomplish this; and  
  - cooperate with other professionals in order to deliver services within their schools which are appropriate to meet the needs of all students within their catchment areas. |
System of Care

“A system of care is a comprehensive spectrum of mental health and other necessary services which are organized into a coordinated network to meet the multiple and changing needs of severely emotionally disturbed children and adolescents” (Stroul & Friedman, 1986, p. 3). It is “child-centered with the needs of the child and family dictating the types and mix of services provided...in an environment and a manner that enhances personal dignity of children and families, respects their wishes and individual goals and maximizes their opportunities for involvement and self-determination in the planning and delivery of services” (Stroul & Friedman, 1988b, p. 11).

Wraparound

Wraparound is a mechanism to plan and coordinate services for children with behavioural health needs and their families. It adheres to the following 11 core principles that serve as the philosophical base for the process:

(a) Wraparound efforts must be based in the community.
(b) Services and supports must be individualized to meet the needs of the children and families and not designed to reflect the priorities of the service systems.
(c) The process must be culturally competent and build on the unique values, strengths, and social and racial make-up of children and families.
(d) Parents must be included in every level of development of the process.
(e) Agencies must have access to flexible, non-categorized funding.
(f) The process must be implemented on an inter-agency basis and be owned by the larger community.
(g) Services must be unconditional. If the needs of the child and family change, the child and family are not to be rejected from services. Instead, the services must be changed.
(h) Outcomes must be measured. If they are not, the wraparound process is merely an interesting fad. (VanDenBerg & Grealish, 1996, p. 9). ¹

¹ Wraparound is distinguished from "wrap-around" cited in the BC Ministry of Education Manual of Policies, Procedures and Guidelines (website, 2008). No definition is provided by the BC
1: INTRODUCTION

The Director of Special Education in the school district in which I was employed as a school psychologist invited me into her office. She shared with me the British Columbia (BC) Ministry of Education update entitled, “Students with Special Needs- How Are We Doing?” She was concerned that so few of the students in our school district who were designated in the “Behavioural Needs or Mental Illness” special education category were graduating with a BC “Dogwood” Certificate of Graduation within six years from the time they first enrolled in Grade 8. During our conversation, she asked me two pointed questions, “Why are these students not completing high school?” and “What can we do to improve their high school graduation rate?” I wondered. Who were the students we identified with “Behavioural Needs or Mental Illness” in our district? What factors were associated with their successful or unsuccessful progression through high school? Although I knew the particular circumstances of many of the individual students we identified with emotional and/or behavioural disorders (E/BD) in our district, and I was aware of much research from elsewhere about children and youth with E/BD, I could not easily respond to her two questions from research based on the students we identified with E/BD in BC, let alone in our district. The answers to her two questions perplexed me. Thus, these are the two questions I addressed in this study to improve practice for students with E/BD.

1.1 Identified Problem

Students with E/BD are widely recognized for not doing well in school (e.g., Kauffman & Landrum, 2009; Repie, 2005). Concomitantly with their identified E/BD issues, these students frequently experience learning difficulties (e.g., Rutter & Yule, 1970), academic underachievement (e.g., Levy & Chard, 2001), poor academic skill levels (e.g., Gunter & Denny, 1998), course and grade failure (e.g., Wagner, 1995), as well as high rates of high school noncompletion (e.g., Stoep, Weiss, Kuo, Cheney, & Cohen, 2003; Wagner). Because of their issues, students with E/BD are recognized as being difficult to engage, teach, and maintain in school (e.g., McCurdy, Cundari, & Lentz, 1990). They are also vulnerable to a plethora of pejorative outcomes after they leave the public education system and enter the world of postsecondary education or employment including: poor attendance or success in postsecondary education; poor career experience; suicide; homicide; substance abuse; perpetration of child abuse; teenage pregnancy; crime; as well as high rates of institutionalization and incarceration.

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2 The term emotional and/or behavioural disorders (E/BD) is used throughout this study although it is recognized that various other terms are used in the literature including ED (emotionally disturbed) and SED (severely emotionally disturbed).
(K. H. Armstrong, Dedrick, & Greenbaum, 2003; Bound & Johnson, 1992; Cassel, Chow, de Moulin, & Reiger, 2001; Pumariega, Winters, & Huffine, 2003; Sinclair, Christenson, & Thurlow, 2005; Yampolskaya, Brown, & Greenbaum, 2002; Zabel & Nigro, 1999). The poor educational and post school outcomes of students with E/BD have concerned many who have recognized their lifelong lack of success as a crisis in education (Cook, Landrum, Tankersley, & Kauffman, 2003).

In BC, the Ministry of Education has recognized that many students with E/BD, identified in this province as students with “Behavioural Needs or Mental Illness”, have not transitioned successfully from grade-to-grade in high school and have left school not having completed an academic BC “Dogwood” Certificate of Graduation (BC MoE, 2008). In fact, the BC Ministry of Education stated that in the 2007-08 school year, only 30% of students who had behaviour designations in the province’s public high schools did graduate with the province’s “Dogwood” Certificate of Graduation, having completed a five-year graduation program within six years despite having received special education services (BC MoE, 2008). This rate of graduation is compared to the 83% of students without special needs reported for that same year who did successfully graduate with the BC “Dogwood” Certificate of Graduation within six years.

In BC, as elsewhere, school districts have provided individual and system-wide interventions to address the identified concerns of students with E/BD. Many of these interventions have addressed these students’ emotional and/or behavioural functioning. If, however, school districts are to improve the educational success of students with E/BD, educators will need to focus not only on the emotional and/or behavioural functioning of these students but also on the challenges these students experience in their academic learning and factors associated with their educational success. To do this effectively, educators need to understand: (a) the characteristics of the students that school districts in BC identify with E/BD; (b) the family, community, and education factors related to school success for these students; (c) the nature of the difficulties these students have in achieving academic success; and, (d) the interventions that have proven effective in improving their academic success.

Understanding the characteristics of students that school districts identify with E/BD, understanding the family, community, and education factors associated with their school success, understanding the nature of the difficulties these students have in attaining academic success and knowing effective interventions to improve their school success are difficult as there is limited knowledge about the characteristics of students that school systems identify in special education categories because of their E/BD. This is because the group of students identified with E/BD is heterogeneous in nature, and there is substantial variability in the type, prevalence, and severity of their disorders, which are influenced by both their individual characteristics such as age, sex, and intelligence (Mash & Barkley, 2003), and the heterogeneity of their disorders with regard to etiology and outcome (Kagan, 1997). These students also differ by the situational and

---

3 This report also includes the adjusted graduation rate based on tracking graduation results and out-migration estimates for six years. It indicates that a further 5% of students with behaviour disabilities graduated from the 5-year graduation program within 8 years having received the Adult Graduation Diploma.
social contexts in which they live, attend school, and in which judgments about their behaviours occur. As well, as much of the extant research is U.S. based, it may have limited applicability to the BC context because of different criteria used for identifying students with E/BD, the different rates of identification from those in BC, as well as differences in the U.S. education and medical systems that support students with E/BD. Applying findings from school systems elsewhere in Canada to the BC context is also problematic as criteria for identification of students with E/BD varies among provinces. Thus, although it is challenging to gain a more complete understanding of the characteristics of students with E/BD in BC, as well as the services and interventions that support them, this understanding is necessary in order to identify factors associated with their successful grade-to-grade transition and graduation as well as to develop and implement effective individual and system wide interventions for them.

1.2 Research Setting

This study took place during the 2007-08 school year in a suburban school district located in BC. For the study, the district was given the pseudonym “Sunnyville”. In the 2007-08 school year, the Sunnyville School District served 15358 students in Kindergarten to Grade 12, 8284 of whom were in elementary school (Kindergarten to Grade 7), and 7074 of whom were in high school (Grades 8-12). Of the students in Kindergarten to Grade 12, 365 were reported to the Ministry of Education as students with E/BD on September 30, 2007. In the 2007-08 school year, the Sunnyville School District consisted of 22 elementary schools, 6 regular secondary schools and 2 alternate secondary schools. One of the alternate secondary schools served students from Grades 8-12 and the other served students from Grades 10-12. Both alternative schools served students who had been out of school or who were at risk of being out of school due to behaviours that made it difficult for them to function in a regular setting. One of the alternative schools also served students who were teen parents although no students in this study were identified as teen parents. The district also maintained community education centers that offered secondary school completion courses. The community education centres were not included in this study.

1.3 Purpose of the Study

The purpose of this study was to identify factors associated with the successful grade-to-grade transition and graduation of high school students identified with “Behavioural Needs or Mental Illness” (E/BD) in a suburban school district in BC, Canada, in order to better understand factors contributing to the school success of this population. In this study, the following research questions were addressed:

**Primary Research Question**

*What factors are associated with the successful grade-to-grade transition and graduation of high school students identified with “Behavioural Needs or Mental Illness” in a suburban school district in BC, Canada?*
Secondary Research Questions

1. What is known about the identity of students, in the school district utilized for this study, who are identified with “Behavioural Needs or Mental Illness” at the two levels of severity: “Students Requiring Moderate Behaviour Support or Students with Mental Illness”; and, “Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness”?

2. What individual, family, community, and school factors are associated with the successful grade-to-grade transition and graduation of students identified with “Behavioural Needs or Mental Illness” in Grades 8-12, in a suburban school district in British Columbia, Canada?

3. How does the case study evidence from the selected school district compare with literature about children and youth identified with “Behavioural Needs or Mental Illness” in populations and schools from elsewhere?

1.4 Research Method to Address the Research Question

A mixed methods case study approach was used to develop an identity construct of the students in the Sunnyville School District who were identified with “Behavioural Needs or Mental Illness” (E/BD) on a chosen date, which was May 30, 2008. This date was chosen to capture the behaviour designations in place for the school year but not those changes put in place as a result of year end reviews. On this date, 384 students in the selected school district were identified with “Behavioural Needs or Mental Illness” in the following two categories:

- “Students Requiring Moderate Behaviour Support or Students with Mental Illness”; and
- “Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness”.

A mixed methods case study approach was also used to determine some individual, family, community, and school factors associated with the successful grade-to-grade transition and graduation of the 229 students in Grades 8-12 identified with “Behavioural Needs or Mental Illness” (E/BD) on May 30, 2008.

The study analyzed district held special education file information in order to collect the following information on the selected students:

- gender;
- grade;
- diagnoses and/or behaviour descriptors;
- special needs identification(s) including grade(s) identified; length of time identified; and changes in identification(s);
- success or lack of success in the four core subjects (English or Communications; Social Studies, First Nations Studies or Civic Studies; Mathematics Essentials or Mathematics Applications or Mathematics Principles; and a science course) in Grades 8-11 with passing grades by June 30, 2008 or successful graduation with
the BC “Dogwood” Certificate of Graduation in June 2008 or program modification by that date;

- basic cognitive scores as identified by standardized assessment measures (e.g., verbal, perceptual reasoning, processing speed, memory);
- living arrangements (e.g., both parents; single parent; grandparent(s) or other relative(s); placement “in care”; independent living);
- educational placement (alternate school; French Immersion program);
- additional educational support services beyond those provided specifically for students identified with E/BD (e.g., speech and language, occupational therapy, aboriginal education\(^4\), English as a second language); and
- community support service(s) received.

File reviews were conducted for each identified student. From the file reviews, a database of information was developed from which to identify factors associated with the successful grade-to-grade transition of the students in Grades 8-11, and graduation with a BC “Dogwood” Certificate of Graduation for students in Grade 12. For this study, success in high school was defined as having completed the four core subjects (English or Communications; Social Studies, First Nations Studies or Civic Studies; Mathematics Essentials or Mathematics Applications or Mathematics Principles; and a science course) in Grades 8-11 with passing grades by June 30, 2008 or successful graduation with the BC “Dogwood” Certificate of Graduation by that date.

From the tabulated evidence, themes were generated that were used to identify the areas of literature to collect. The literature collected describes:

- the characteristics of children and youth with E/BD in community, clinical, and school populations from elsewhere;
- family and community involvement found to have an impact on the learning and academic success of students with E/BD; and
- findings about the learning and achievement of children and youth with E/BD, as well as factors and interventions associated with their academic success or lack of success.

The tabulated evidence was then compared with the collected literature to fill gaps in the literature base, to add information from the literature to expand understanding of the tabulated evidence, as well as to find differences and similarities in research conducted elsewhere. The information derived from this mixed methods case study analysis of all students identified with E/BD in one school district in BC is significant in that little comprehensive information was available about this category of students in BC or elsewhere. This study fills some research gaps and needs identified in the literature with information from a BC context. It provides recommendations for improving practice within schools, at the district level, and at the provincial level. It also provides direction for further research.

\(^4\) Aboriginal education services were noted but were not analyzed in this dissertation.
1.5 Educational Context for the Study

In Canada, individual provinces and territories are mainly responsible for developing educational policies, practices, and services for Kindergarten to Grade 12 education with the exception of education provided for aboriginal Canadians (Dworet & Maich, 2007). In the province of BC, where this study was conducted, the mandate of the Ministry of Education (MoE) is to provide all students with “equitable access to learning, opportunities for achievement and the pursuit of excellence in all aspects of their educational programs” (BC MoE, Special Education Services: A Manual, 2008, n.p). BC “promotes an inclusive education system in which students with special needs are fully participating members of a community of learners” (MoE, website). The Ministry also states that students who have special needs are to receive special education programs and services that enable them to have equitable access to learning, and opportunities to pursue and achieve the goals of their educational programs (BC MoE, website).

In BC, to assist school districts in identifying students who have special needs and to resource appropriate educational programs for them, 12 special needs categories have been established. Two of these categories are for students with E/BD. Identification in these categories is to capture students whose need for a moderate level of support or an intensive level of intervention for their disorders place them at moderate or greater risk in school as evidenced by their behaviours in more than one setting, with more than one person, or they are at serious risk in school, at home, and in the community without extensive support. These students must also receive specific special education services aligned with their goals, which in turn are to correspond to the category in which they are identified.

As described in the BC Special Education Services: A Manual of Policies, Procedures and Guidelines (BC MoE, 2008), the BC Ministry of Education categorizes students with “Behavioural Needs or Mental Illness” by the severity of their need for services as well as by the specialized services they receive. Within the categories, students identified as having a mental illness are distinguished from those with behavioural concerns. Students who need and receive a moderate level of support are described as “Students Requiring Moderate Behaviour Support or Students with Mental Illness”. According to the manual, students with moderate behaviours demonstrate: “aggression of a physical, emotional or sexual nature and/or hyperactivity; and/or behaviours related to social problems such as delinquency, substance abuse, child abuse or neglect” (n.p.). Students identified as having a mental illness demonstrate: “negative or undesirable internalized psychological states such as anxiety, stress-related disorders, and depression; and/or behaviours related to disabling conditions, such as thought disorders or neurological or physiological conditions” (n.p.). Students who need and receive a more advanced level of additional support are described as “Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness”. For these very few students, expected to comprise less than 1% of the student population

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5 Students with Complex Developmental Behavioural Conditions may also receive identification in the “Physical Disabilities or Chronic Health Impairments” category.
province-wide, their behaviour and/or mental health challenges are so profound that they are seriously at risk at school, at home, and in the community without extensive support. These students exhibit behaviours that are “antisocial or extremely disruptive in most environments (i.e., school, home, and community) that are consistent and persistent over time” (MoE, n.p.). Their serious mental health conditions are frequently diagnosed by a qualified mental health clinician, and interventions for them are co-ordinated by the school and community with the goal of “successfully managing, educating, and maintaining them at school and in the community” (MoE, n.p.).

The special education identification criteria for students who have “Behavioural Needs or Mental Illness” in BC have critical classification and selection limitations that have implications for understanding the students identified in the categories. For instance, in order to qualify at the intensive/serious level, the manual states that there is a requirement for diminished school performance as well as collaboration by the school with the outside service(s). These outside services are frequently provided by other government ministries such as The Ministry of Children and Family Development or by community agencies. Some students who, for various reasons such as a lack of availability of services, have not obtained outside services or who do not have the outside services collaborate with the school system on their behalf, may be excluded from the intensive/serious category. In addition, as the Ministry indicates that approximately 1% of students be identified at the intensive/serious level, a limitation on the number of students identified is implied. Finally, although concomitant student concerns are to be recognized and addressed in individual education plans (IEPs), only one special needs identification is reported to the Ministry for each identified student, and therefore, students who maintain secondary identification as students with “Behavioural Needs or Mental Illness” are not classified by the Ministry in the behavioural categories and they are not included in reporting documentation for the “Behavioural Needs or Mental Illness” categories.

The process to address the needs of students with E/BD in BC is described in the BC Special Education Services: A Manual of Policies, Procedures and Guidelines (2008). The manual states that in the province’s public schools, most students who have behaviour challenges are to be managed through classroom and school wide discipline as well as through school counselling or other types of individual services and interventions. When a behavioural need is first identified, teachers are to consult and problem solve with the student’s parent(s)/guardian(s). If the behavioural difficulties continue, the teacher is to speak with colleagues including previous teachers. The student can then be referred to the school based team that assists the classroom teacher to develop and implement instructional and/or management strategies and coordinate support resources for the student within the school (BC MoE, 2008). The school-based team may subsequently access other school or district support services (e.g., occupational therapy; speech and language therapy; school psychology) as well as

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6 In practice, some districts identify students at the intensive/serious level who do not have the requisite outside service because of limited availability of services or the family’s refusal of outside services. In the Sunnyville School District, the policy manual directives were believed to be followed as written.
medical (e.g., paediatric) and mental health services in the community. The manual states that if a student’s behaviours occur in different settings and with different individuals, the intervention plan developed by the team may also be coordinated with community service providers or agencies in order to address the student’s behaviours at school, at home, and in the community. For students identified as requiring intensive behaviour intervention or students with a serious mental illness, this coordinated cross-agency planning is required. Parents and students (whenever possible) are to be integral participants in the planning process. Community support persons may also have significant involvement on the school planning teams.

In BC, students identified with “Behavioural Needs or Mental Illness” both need and receive support services beyond those provided to all students in order for them to meet the goals of their IEPs and the Ministry of Education prescribed learning outcomes whenever possible. They must have an IEP with goals that address their behaviour or social/emotional needs or conditions of their mental illness as well as measures for their achievement of these goals. The manual also states that the student must receive one or more of: direct interventions in the classroom; placement in a program designed to promote behavioural change and implement the individual education plan; and/or “ongoing, individually implemented social skills training, and/or instruction in behavioural and learning strategies” (BC MoE, 2008, n.p.). BC has adopted the principle of inclusion for students with special needs. This means that

A Board of Education must provide a student who has special needs with an educational program in a classroom where the student is integrated with other students who do not have special needs, unless the educational needs of the student with special needs or other students indicate that the educational program of the student with special needs should be provided otherwise (MoE, website, n.p.).

The Ministry has also stated that “the practice of inclusion is not necessarily synonymous with integration” (n.p.). Integration is described as the practice of including students with special needs in educational settings with their peers who do not have special needs with the provision of necessary accommodations, determined on an individual basis, to enable them to be successful in school. According to the manual, a principle of “placement in the most enabling learning environment” (n.p.) is used to make decisions about the “extent to which an individual student is placed in regular classrooms, or assigned to an alternate placement” (n.p.).

While many students identified with “Behavioural Needs or Mental Illness” receive their education in regular classes in regular schools, many others receive their education in alternate placements. These alternate placements are considered only after students are unsuccessful, are predicted to be unsuccessful in regular education settings, or are considered unsafe to themselves or others, if they were to be integrated in regular educational settings. The Ministry of Education states that
This should only be done when the Board of Education has made all reasonable efforts to integrate the student, and it is clear that a combination of education in such classes and supplementary support cannot meet their educational or social needs, or when there is clear evidence that partial or full placement in another setting is the only option after considering their educational needs or the educational needs of others (MoE, website, n.p.).

Thus, in alignment with the practice of inclusion, students with E/BD receive their education in the context of a variety of educational models that range in their level of inclusiveness (regular programs in neighbourhood schools; regular programs with alternate courses in regular schools; alternate programs within regular schools; alternative schools for students with E/BD). While integration in regular classes in regular schools may be optimal inclusion, for many students with E/BD, placement in settings that are more restrictive is necessary to enable them to successfully meet their learning outcomes.

1.6 Theoretical Perspective for the Study

The theoretical perspective that frames and informs this study is the ecological systems perspective proposed by developmental psychologist, Uri Bronfenbrenner (1917-2005). Bronfenbrenner was a pioneer in urging human service systems to understand children against the contexts of their lives including their families, extended family system, school, work, peers, health care providers, as well as their community and cultural associations (Winters & Pumariega, 2007). The ecological systems perspective “focuses on the progressive accommodation, throughout the life span, between the growing human organism and the changing environments in which it actually lives and grows” (Bronfenbrenner, 1977, p. 513). The ecological systems framework was chosen for this study as it aligns with the system of care philosophy that promotes and describes the conjoined service systems among child welfare, mental health, juvenile justice, and special education, which are the services that typically provide collaborative support for severely emotionally disturbed children and youth (M. H. Epstein et al., 2003). In BC, these service systems typically utilize two models, namely, integrated case management and “wrap-around”, as recommended by the Ministry of Education (BC MoE, 2008).

The ecological perspective and model developed by Bronfenbrenner place the individual in four ecological circles, the microsystem, mesosystem, exosystem, and macrosystem, each nested within another (Bronfenbrenner, 1979; 1986) (Figure 1). An additional dimension, the chronosystem, is added. The individual is conceptualized as interacting and as being influenced within each of these levels, which are uniquely their own.
**Microsystem Level**

At the centre of the nested circles is the microsystem level, which consists of the key individual’s face-to-face interactions. Included for students with E/BD are relationships with family, friends, teachers, and peers at school, as well as relationships with individual health professionals in the community. Each of the relationships at this level is seen as directly influencing each other relationship as well as influencing the individual. For example, the ways in which a family perceives the school system or the community caregivers is considered to be an influence upon the student.

**Mesosystem Level**

The circle beyond the microsystem level is the mesosystem level. It consists of the interlinked system of microsystems and includes the relationships that those at the microsystem level have with individuals and settings apart from the relationships they have with the key individual. Included for students with E/BD are the relationships between a parent and the parent’s workplace; between a parent and the individuals who support the student; and, between staff at the school and support staff in community agencies.

**Exosystem Level**

Beyond the mesosystem level is the exosystem, which is the level of social settings beyond where the individual has any direct interactions or influence on others. This level includes the education and health systems and how they function within the school, community, and province. For example, it includes the practices and policies of a parent’s workplace regarding release time to attend parent-school meetings.
Macrosystem Level

The farthest out level is the macrosystem, which consists of the culture as a whole. It includes government laws, broad belief systems, as well as institutional patterns, practices, and customs that provide a general context for individuals. For students with E/BD, it could include laws, values, beliefs, and ideologies about mental health and behaviour; IEP and behaviour plan system models; assessment practices; graduation standards; philosophies of behaviour management; and intervention practices for individuals with mental health disorders.

Chronosystem

As the lives of individuals are ever-changing over time, Bronfenbrenner identified one further dimension, the chronosystem. This dimension includes the influence of important life events on the individual such as the entry to school, family moves, parent/guardian changes, the transition to high school, and the transition out of school.

In the ecological model, individuals are understood to act in accordance with their perceptions of the environmental structures in their lives. Bronfenbrenner explained this as the growing person acquiring a more extended, differentiated, and valid conception of their ecological environment and becoming motivated and able to engage in activities that reveal the properties of, sustain, or restructure that environment at the various levels (1979). According to Bronfenbrenner,

the scientific study of individual context is that of the progressive, mutual accommodation, throughout the life span, between a growing human organism and the changing environment in which it lives, as this process is affected by relations obtaining within and between these immediate settings as well as the larger social contexts, both formal and informal, in which the settings are embedded (1977, p. 514).

Bronfenbrenner believed that disturbance is not a disorder within the individual but is an imbalance or mismatch between the individual and the individual’s environment (1979). From this imbalance or mismatch, problems can arise. An example is when a student’s behaviour and their classroom expectations are not in concordance. The ecological perspective would then believe that the coordination of the youth’s needs with their environment must happen in order to facilitate best functioning (Marks & Lawson, 2005).

Although this study is framed within an ecological systems perspective, other models and understandings are incorporated. For instance, children’s problems are sometimes placed under the umbrella of child psychopathology, a term used to denote the “full range of all disorders of childhood and adolescence...embedded in developmental processes and sequences” (Mash & Dozois, 2003, p. 54). Under the psychopathology umbrella, various theories and models are useful for understanding disorders, however “no single [theory or] model can fully explain the complexities involved in understanding child psychopathology” (Mash & Dozois, p. 44) and “very seldom would a competent teacher, psychologist, or psychiatrist view a child or youth in...
only one way” (Kauffman & Landrum, 2009, pp. 73-74). Thus, most theories and models encompass numerous perspectives (Mash & Barkley, 2003) and many function in combination (Kauffman & Landrum). For example, cognitive-behavioural theories incorporate features of behaviourism that assume “the essence of the problem is the behaviour itself” and “behaviour is the function of environmental events” (Kauffman & Landrum, p. 76). They then combine those features with features of cognitive theories, which often focus “on the importance of positive cognitions including the role of the individual’s context on cognitions” (Mash & Barkley, p. 46). Kauffman and Landrum list and describe four general models used in educational settings to understand the behaviour problems of children and youth. These are:

1) biological, which understands a person perceiving, thinking or acting only with the involvement of his or her anatomy and physiology; 2) psychoeducational, which shows concern for unconscious motivations and underlying conflicts in the contexts of functioning in school, home, and the community; 3) ecological, which considers the individual as enmeshed in a complex social system and considers how behaviour fits in its social context; and 4) behavioural, which considers maladaptive behaviour as an inappropriate learned response and intervention consists of “choosing target responses, measuring their current level, analyzing probable controlling environmental events, and changing antecedent or consequent events until reliable changes are produced in the target behaviours” (p. 76).

Each of these models is reflected in the literature used to describe students with E/BD.

1.7 Importance of this Study to Address Gaps in Knowledge in BC

In BC, much information that would assist school systems understand the academic needs and plan appropriate individual and group interventions for students identified with E/BD is currently unknown or unreported. In evidence:

• For the 2-3% of students the Ministry of Education has identified in the “Behavioural Needs or Mental Illness” categories, it does not collect information about the specific or concurrent disorders these students have. Although prevalence studies provide an indication of general rates of disorder in children and youth in society, they do not report the rates of disorder in students designated with E/BD in the BC public school system.

• As the Ministry of Education collects district and provincial information under only one current identification category for each student, it does not fully report students’ special needs identifications that may have a significant impact on their ability to make successful grade-to-grade transitions and graduate with a BC “Dogwood” Certificate of Graduation. This also means that there are students with other primary special education designations who are also identified in the
“Behavioural Needs or Mental Illness” categories for whom the Ministry does not report information.

- The Ministry of Education does not currently report the lengths of time students in BC have been designated in the “Behavioural Needs or Mental Illness” categories and the grades in which they were first identified. Without this longitudinal information, it is unknown whether the students identified with E/BD in earlier grades are the students identified with E/BD in later grades or upon graduation with a Ministry of Education “Dogwood” Certificate of Graduation.

- The Ministry of Education does not currently report prior identification(s) once removed. This means that school systems may not be aware if students were once identified with E/BD, learning disabilities, or cognitive impairments.

- The Ministry of Education does not currently report the rates of successful high school grade-to-grade transition or graduation with a BC Ministry of Education “Dogwood” Certificate of Graduation for students who were identified with E/BD in elementary school unless they continued to be identified in Grade 8 or beyond. This means that the outcomes of students identified with E/BD in elementary school are unknown and/or are unreported.

- The relationship between students identified in the moderate E/BD category and those identified in the intensive/serious E/BD category is not currently reported. This means that it is unknown if and how students progress between the categories.

- As information about interventions provided to students identified with E/BD is not currently collected in BC, it is unknown what these models and practices are, whether current models practices are correlated to worsening or bettering of behaviour and/or academic success, or whether some interventions are more or less effective than others.

- Information is unknown beyond a student-by-student basis as to what professionals from what disciplines have been involved or have provided intervention for students identified with E/BD in the BC school system or the extent of their involvement. Knowing this information would enable school systems to collect information about these service providers and the interventions they provide for students identified with E/BD beyond those provided for individual students so that better collaborative relationships could be developed with the service providers. Aligning interventions provided by the school system with those provided by other service providers would enable a more continuous and seamless system-wide service intervention that would provide information to school districts to help them plan and implement collaborative endeavours.

- Little is currently known or reported about the individual behavioural, school, family, and community factors associated with school success for students identified with E/BD in BC. Knowing this information would help to target individual and system-wide interventions where they would have the most impact.
1.8 Gaps in the Research Literature

Utilizing existing research findings from literature to compare with the findings in this study is particularly difficult to do from an evidence or research-based perspective for a number of reasons. The first and most important reason for this difficulty is the limited amount of evidence based research available that addresses the learning and school success of students with E/BD. This paucity of research has occurred for the following reasons:

- Historically, schools as well as researchers have concentrated on ways to control and eliminate the problem behaviours of students with E/BD (Gunter, Jack, Shores, Carrell, & Flowers, 1993; Pierce, Reid, & Epstein, 2004; Shores et al., 1993; Wehby Symons, Canale, & Go, 1998). This may have occurred because of the “notion that students’ behaviour must be controlled before they can be taught” (Wehby, Falk, Barton-Arwood, Lane, & Cooley, 2003, p. 194), which resulted in the academic needs of students with E/BD being neglected in order to concentrate on the remediation of their social skills, emotional difficulties, and behaviour deficits (Levy & Chard, 2001; Templeton, Neel, & Blood, 2008; Vaughn, Levy, Coleman, & Bos, 2002; Walker, Irvin, Noell, & Singer, 1992; Wehby et al., 2003). Then, when their behaviours were controlled, they were no longer identified as students with E/BD. As the emphasis in schools has been on controlling behaviour, the research emphasis from the field of education may also have been on how to better control the behaviour of students with E/BD rather than on how to improve their academic learning. This lack of research has resulted in an “absence of an empirically valid knowledge base with which to guide future research” (Wehby, Lane, & Falk, 2003, p.194) and vastly more research being generated about the behaviour of students with E/BD than about their academic learning (Levy & Chard; Pierce et al.).

- Much of the research about children and youth with E/BD emanates from outside the field of education where there may be more interest in the behaviour of individuals than about their academic needs. In evidence, an internet search of the combined terms “behaviour,” “mental health,” “children”, and “youth” yielded scholarly works from many disciplines including general medicine, psychiatry, paediatrics, public health, psychology, social work, sociology, and criminology. Thus, although children and youth with E/BD have been the subject of much research, the connection of this research to student learning and school success may have been tangential or limited.

- Collaboration between clinical researchers and service provision researchers who are involved in intervention research for children and youth identified with E/BD has been limited (Garland, Plemmonds, & Koontz, 2006). This has resulted in limited transportability of findings from clinical studies to implementation studies of practical use in school settings (Schoenwald & Hoagwood, 2001). Because of this limited collaboration, there are gaps in knowledge between what researchers know and what mental health service providers know and can implement (Weisz, Donenberg, Han, & Weiss, 1995). In
response, there has been a call for increased collaboration between researchers and practitioners so that these disparities in the clinical utility of research can be reduced (Garland et al.).

- There may be limited specific research available from which to implement effective interventions to improve the academic success of specific students identified with E/BD as the effectiveness of research may be both developmentally and etiologically based. There is currently little known about the progression of psychopathology of mental health and behaviour disorders in children and youth, and about the specific risk and resiliency factors for children and youth with specific diagnoses (Dulmus & Rapp-Pagliacci, 2000). This means that the information required to put interventions in place for these students may be limited or not available. An example of the importance of specificity of intervention is found in the work of K. L. Lane, Wehby, Robertson, and Rogers (2007), who investigated the characteristics of high school students who did and did not respond to universal positive behaviour support. They found that students who exhibited predominantly internalizing behaviour problems made the greatest academic gains with a universal positive behaviour support system, whereas those who also had external behaviour problems made the fewest gains.

- There is little information available about the kinds of problems that school identified students with E/BD have, and the extent of their difficulties (Dery, Toupin, Pauze, & Verlaan, 2004; Kauffman, 2008). Without this information, it is impossible to ask, “What works for whom, under what conditions and for how long?” (Lambert, Dousette, & Bickman, 2001, p. 273). This information is not easily available for two reasons. First, the identity of students with E/BD has largely been elusive as these students frequently have their identification attached, removed, or changed over time as a result of their changing developmental needs, improvement or worsening of behaviours, and because they have come and gone from programs, schools, and districts with a fluidity unfound in other categories of special needs students. Second, utilization of information from different contexts, regions or countries is also limited, as criteria for identification varies as do rates of identification. In BC, behaviours such as aggression, delinquency, substance abuse, or behaviours related to being the recipient of child abuse or neglect are recognized as qualifying for identification whereas, in the U.S. school system, behaviours resulting from abuse or neglect are not specified in the categorization criteria. As well, in the U.S., students described with terms such as “conduct disordered”, “delinquent”, “angry”, “having an explosive temperament”, and “missing school due to personal choice” may be excluded from the school category for students with E/BD if these behaviours were considered to be characteristic of social maladjustment.

- The information needed to describe the characteristics of students identified with E/BD in schools has not often been collected by school systems. For instance, Cullinan and Epstein (2001) measured the comorbid disorders of a sample of students identified with E/BD in the school system. They stated that there is indirect research evidence that many students identified with E/BD in the U.S.
have multiple severe problems. They also noted that the extent of comorbidity, as well as particulars involving the students’ sex, racial or ethnic status, school age-grade level, and educational placement were little known in other geographic locations and by other instruments or criteria such as the Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition (DSM-IV) (American Psychiatric Association, 1994).

- Although schools are the major providers of mental health services for children and youth (Burns et al., 1995; Leaf et al., 1996; Zahner, Pawelkiewicz, DeFrancesco, & Adnopoz, 1992), the challenges that schools have faced in working with these students (Kauffman, 2008), as well as what services the students have received, are largely unknown (Levy & Chard, 2001; Rones & Hoagwood, 2000). Therefore, the comparative effectiveness of services to address the challenges these students experience cannot be ascertained. Without comparative information, it is not possible to identify services that are more or less effective for students with E/BD, and it is not possible to compare the specific programs and interventions provided by these services.

Applying existing research findings to school contexts is difficult, as much of the research about children and youth with E/BD, both in and out of the school context, is described as problematic, as noted in reviews by Gunter and Denny (1998), Ruhl and Berlinghoff (1992), as well as by Skiba and Casey (1985). In the extant research, participant descriptions were often absent or incomplete. Ruhl and Berlinghoff reported that only 40% of the studies they reviewed included information on cognitive functioning, 20% contained information on race or cultural background, and only 7% included information on the socioeconomic status of subjects. They also expressed concern that research design issues affected the validity of the information presented. Van Ameringen, Mancini, and Farvolden (2003) noted that the research on anxiety in the school population had not made meaningful use of medical, psychiatric or school records with the exception of records of academic achievement. Pierce, Reid, and Epstein (2004) reported that content areas such as written expression or other language skills; science; social studies; strategy instruction; test-taking skills; and homework completion were not dealt with in the very limited number of research experiments undertaken between 1996 and 2002.

Trout, Nordness, Pierce, and Epstein (2003) completed a comprehensive examination of the research literature on students with E/BD published in a number of peer-reviewed journals between 1961 and 2000. In the 65 articles that met their selection criteria, significant limitations were found to exist with “complete reporting of student information, inadequate research on specific academic skills sets and limited numbers of students served in general education settings” (p. 198). These authors called for future research to have:

descriptive marker variables such as the number of students categorized by (a) gender, (b) age, (c) grade level, (d) geographic location, (e) race/ethnicity, (f) placement settings (e.g., public school, institution), (g) SES [socioeconomic status], (h) primary language, (i)
Reid, Gonzalez, Nordness, Trout, and Epstein (2004) completed a meta-analysis of the academic performance characteristics of students with E/BD. In their review of 26 studies published between 1961 and 2000, they identified problems with the sampling criteria used. Specifically, most studies appeared to have utilized convenience samples and so it was unknown how representative of the E/BD population the subjects in the studies were. Student characteristics such as gender, race, ethnicity, and socioeconomic status were also not well reported. As well, most of the research focused on student deficits in reading and literacy and excluded student deficits in math and spelling. These authors recommended that further research make use of curricular-based measures and that longitudinal studies be undertaken.

Mooney, Epstein, Reid, and Nelson (2003) reviewed 55 studies published between 1975 and 2002 in order to examine overall status and trends in the experimental literature relating to interventions designed to improve the academic functioning of students with E/BD. These authors found that the studies reviewed had small numbers of participants; participant descriptions were sketchy and did not differentiate between males and females (the results may not generalize to both); and few studies included discernable race or ethnicity data. The majority of studies reviewed were conducted in special education settings and only 4 of the 58 studies were conducted in general education classrooms. In addition, the researchers noted that the average academic intervention lasted only 12 hours, which they claimed was not a significant enough length of time for lasting change. In reviewing the research, Mooney et al. recommended that future research needed to:

- increase the number of studies and sample sizes
- provide detailed descriptions of participants, including age, gender, race, SES, identification procedures, and IQ
- conduct studies with female and minority students with ED [emotional disturbance]
- conduct research in settings other than the special education classroom
- provide a conceptual framework that incorporated single-subject studies and randomized clinical trials
- ensure that treatments were being implemented as intended and that consumer opinions were being taken into account
- increase the use of dependent variables with benchmarks
- broaden the focus of academic studies to include content areas such as social studies, science, learning strategies, and vocational skills
- incorporate progress-monitoring features into the designs (p. 284).

Pierce et al. (2004) reviewed 30 studies of teacher-mediated interventions to improve the academic functioning of students with E/BD that had been published between 1963 and 2000. They noted that a majority of the studies focused on reading
and had positive outcomes. Overall, teacher-mediated interventions were found to be effective for improving the academic performance of students with E/BD. They also noted that there were too few studies, the interventions researched were too diverse to draw strong conclusions, and the average length of time an intervention was in place was 22 days, a time questionable for long-term change. They noted that 56% of the studies included students from nonschool settings (e.g., clinical settings), 23.3% were conducted in special education resource rooms, 10% were conducted in self-contained educational settings, and only 6.7% of the studies were conducted in general education classes where most students identified with E/BD received their education.

Griffith, Trout, Hagaman, and Harper (2008) conducted a review of interventions to improve the literacy functioning of adolescents with E/BD published between 1965 and 2005. The 17 studies they reviewed were in the areas of spelling, reading, and writing. The authors noted that participants’ characteristics were not well reported; that information regarding gender, ethnicity, socioeconomic status, and IQ was often not provided; and that participants were not particularly diverse or representative of the population of students with E/BD. The researched settings were predominantly self-contained classrooms despite the emphasis in the field on inclusion of students with E/BD in general education classrooms. They found that the most common intervention focus was on spelling although interventions for reading fluency, writing, reading comprehension, and verb identification were also represented. They noted that very little research had been done on reading interventions for adolescents with E/BD including research utilizing the two most effective interventions for students with learning disabilities (strategy instruction and direct instruction). Length of research ranged from 4 to 34 sessions, which the authors described as insufficient for long-term, sustained effects to take place. The interventions utilized technology, direct instruction, peer tutoring, self-regulation strategies, domain-specific strategies, and practice, representing 9 different interventions across the 17 studies, which also limited conclusions about effectiveness.

Schoenfeld and Janney (2008) reviewed interventions for students with anxiety disorders. They found that there was an absence of qualitative studies, a lack of attention to facets of enquiry that lend themselves to qualitative analysis, such as experiential aspects of anxiety disorders in schools, teacher self-efficacy when working with students with EBD, or information sharing between medical and educational professionals (p. 593).

They also noted that rating scales and structured interviews with students were the most common source of information but that direct observation of students was not utilized in any of the studies reviewed. The studies reviewed did not, “as a rule” make use of medical, psychiatric, or existing school records with the exception of measures of academic achievement. Only one study crossed between psychology and educational practice and the research suggested, “a troubling lack of communication between educational and mental health professionals who may be working towards the same
goals with the same child” (p. 593). J. Wood (2006) conducted the study referenced as crossing between professionals. This study noted that changes in anxiety in children aged 6 to 13 influenced trajectories of children’s scholastic and social functioning as measured by ratings from children, parents or independent evaluators after a therapist-led cognitive-behavioural intervention program.

Templeton et al. (2008) completed a meta-analysis of mathematics interventions for students with E/BD. The 15 studies published between 1976 and 2006 that met their criteria for inclusion focused on strategy instruction, instructional delivery, and environmental accommodation. Of these three elements, environmental accommodation was the only one to establish a significant group-mean difference in that interventions without environmental accommodation were found to be more effective as students taught in an inclusive setting did better than those educated in a separate setting. Generalization of learning was found to be insufficiently assessed in the interventions reviewed, and these authors call for studies to examine how students “develop, obtain and implement practices for gaining effective results from maintenance and generalization phases” (p. 235). They concluded by discussing the dichotomy of academics versus social instruction for students with E/BD by stating:

The paucity of research in the area of math interventions for EBD is disconcerting to those who research and teach within this field of special education. Granted, the social behaviours of children with EBD are important to target for positive change, but this should not be at the expense of ignoring academic skills that may support or be supported by the social and emotional growth. That only one third, or five, studies in this sample took place in the past decade and that only two of those focused on explicit mathematics strategies are disappointing statistics (p. 36).

Reading instruction intervention research was found to be limited for students with E/BD. Levy and Chard (2001) stated that there was little incentive to study this area despite co-occurrence of reading and social/behavioural problems and that the current knowledge base of documented effective instructional practices for students with E/BD was unknown. Vaughn, Levy, Coleman, and Bos (2002) examined observation studies of reading instruction for both students with learning disabilities and those with E/BD. They found 16 studies conducted between 1975 and 2000 and also commented on the scant amount of research on students with E/BD. Wehby, Falk et al. (2003) noted little empirical evidence regarding the effectiveness of comprehensive reading interventions for students with E/BD. Coleman and Vaughan (2000) identified only 8 studies that specifically researched reading interventions for elementary students with E/BD. They and others found that peer tutoring strategies improved both student achievement and behavioural outcomes (Franca, Kerr, Reitz, & Lambert, 1990; Osguthorpe & Scruggs, 1986).

G. J. Benner, Nelson, and Epstein (2002) reviewed 26 research studies published between 1980 and 1996 on the prevalence, strength, durability, and nature of
language deficits in children identified with E/BD. They found that 71% of the students in the studies experienced clinically significant language deficits and 57% of the students with diagnosed language deficits were also identified with E/BD. All studies reviewed used causal/comparative design, which provided no information regarding the strength or nature of the relationship between language and E/BD, thus limiting understanding of the extent to which language interventions would reduce the frequency and severity of E/BD. They reported that participant descriptions provided minimal information concerning ethnicity, socioeconomic status, and family status, and that most participants were sampled from speech clinics, psychiatric facilities, and residential treatment facilities rather than from school settings. They called for further research to focus on identifying predictor and moderator variables and to provide a longitudinal analysis of the nature, reciprocity, and stability of the relationship between E/BD and language.

According to G. J. Benner et al., researchers had also not examined the strength and nature of the relationship between social adjustment and language skills for students with E/BD.

Ryan, Reid, and Epstein (2004) reviewed the 14 cross-age, same-age, class wide peer tutoring or cooperative learning intervention studies published between 1970 and 2002 in order to examine their effect on the academic success of students with E/BD. They concluded that positive academic outcomes were obtained from all types of peer-mediated interventions and there were overall high levels of student satisfaction with the strategies. They noted inconsistencies in the way participant characteristics were reported in the studies, that study settings were not reflective of actual placements for students with E/BD, and that there was a need for additional group studies.

Mooney, Ryan, Uhing, Reid, and Epstein (2005) reviewed 22 research studies published between 1970 and 2002 in order to report on the effectiveness of academic self-management interventions for students with E/BD. In their review of self-monitoring, self-evaluation, self-instruction, goal setting, and strategy instruction interventions, they found large positive effects for a limited range of academic outcomes and that these outcomes were generalized and maintained, however the settings in which the studies took place were not reflective of actual student placement, and there was a lack of group design studies. The authors suggested that further studies needed to:

(a) increase the number of participants; (b) expand the types of self-management procedures beyond self-monitoring and self-evaluation as well as involve academic areas beyond math calculation and written expression; (c) devote more attention to generalization and maintenance of findings; and, (d) conduct research in settings that accurately reflect student placement (p. 218).

Hoagwood et al. (2007) reviewed school-based mental health interventions in studies published between 1990 and 2006. Of the 24 studies that examined both mental health and educational outcomes, 15 were found to have a statistically significant effect on both. Most frequently assessed were grades, reading scores, and math scores. Of the 7 studies conducted on middle to high school students, 3 focussed on conduct
problems, 3 on stress inoculation and 1 on post traumatic stress disorder. The review suggested that the effects of mental health interventions on academic outcomes were modest and were often not maintained. The review also found that the interventions that were effective to address both mental health and academics were time-intensive; complex; involved the students, their parents, and their teachers; as well as worked in multiple contexts such as the school and home.

Trout, Hagaman, Casey, Reid, and Epstein (2008) reviewed the academic and school functioning behaviours of students in out-of-home care in research published between 1940 and 2006. They noted a paucity of research on the out-of-home population and a lack of information on their specific academic functioning. They also noted that there were no previous research reviews on this population. They stated that,

*Without information on academic functioning, general and special educators, child welfare workers, and mental health professionals are limited in their understanding of the broad needs of children and youth in out-of-home care, and are further limited in their abilities to work together to direct and provide sound school-related services for this at-risk population (p. 981).*

The authors were unable to draw conclusions regarding how often these children and youth moved across settings or how the moves affected their academic performance. They stated that for students in out-of-home care, the magnitude of the learning deficits and in what specific areas (e.g., comprehension or academic knowledge) the deficits appeared were unknown. They also called for specificity in research and for researchers to identify the skills evaluated as well as the assessment procedures utilized so that calculation of intervention effects could occur and comparisons could be made across studies.

Some themes emerged with respect to the descriptions of the research gaps and concerns. First, participant descriptions were noted to be absent or lacking in many studies and the existing studies included students both with and without E/BD with unclear criteria for selection of participants (Mooney et al., 2003; Pierce et al., 2004; Ruhl & Berlinghoff, 1992; Skiba & Casey, 1985; Trout, Nordness et al., 2003). Mooney et al. commented that "One of the most striking findings that emerged from our analysis is how little we know about the participants in these studies such as gender, race or socioeconomic status" (p. 280). As females usually have more internalizing behaviours such as depression and anxiety disorder (Kataoka et al., 2001), Trout Nordness et al. stated that gender may have significant implications on academic outcomes and needed to be considered.

As there was considerable variability within the population identified with E/BD with regard to the types of disorders and severity of behaviours (Cullinan & Epstein, 2001; Elias, Zins, Graczyk, & Weissburg, 2003; Maag, 2006; Mooney et al., 2003; Rones & Hoagwood, 2000), much research directly examining the characteristics of students identified with E/BD in the school system was identified as needed in order to understand the heterogeneity within the school identified population (Cullinan & Epstein;
Reid et al., 2004). Mooney et al. found that none of the studies they reviewed reported the age of the students when they were initially identified as having E/BD. Trout, Nordness et al. (2003) stated that they expected that students identified earlier who received services may have had different patterns of academic functioning than those who were identified in later grades, either because of the support they received earlier or because their behavioural issues were more severe and they were identified earlier. Mooney et al. (2003) stated that cultural or environmental factors may have significance and needed to be reported as students from impoverished environments or geographic areas that have high levels of violence may have different outcomes.

Many studies were described as having limited context information. E. M. Z. Farmer and T. W. Farmer (2000) reviewed literature applicable to children’s mental health services and found little about the educational placement, status, or interventions provided. They stated that because context lies outside the specialty mental health sector, it tended “to be relegated to superfluous...descriptor(s)” (p. 381) instead of being recognized as the environment that has a significant impact on children. These authors added that they knew, “remarkably little about the context of treatment within the educational sector” (p. 380). Numerous reviews stated that most research tended to examine self-contained special education classes or school-based clinics rather than the inclusive classroom where most students with E/BD received their education. How interventions affected other students in the classes also needed to be considered and researched (Rogers-Adkinson & Hooper, 2003; Trout, Nordness et al., 2003). Schoenfeld and Janney (2008) found that one half of the intervention studies on students with anxiety disorders did not include a description of the educational setting and those that did, commonly excluded students in classrooms for students with E/BD as well as students with severe E/BD. Often the research reported on specific limited populations within single geographic locations (M. H. Epstein & Cullinan, 1983), which resulted in questionable reliability for reproduction by others at different times in different contexts. The argument M. H. Epstein and Cullinan presented was that if the performance of students with E/BD was not compared to peers without disabilities, the interventions were not conducted by classroom teachers, and the context in which treatments occurred was not considered or described sufficiently enough to allow replication, the findings would not be able to be replicated, particularly in the classroom context.

The research literature was also identified as having design limitations or flaws. Gunter and Denny (1998), as well as Ruhl and Berlinghoff (1992), noted that the research literature failed to sufficiently identify effective academic interventions for students with E/BD. Pierce et al. (2004) found that most research was in the areas of reading followed by math, written expression, science, listening comprehension, and oral expression. The duration of interventions was frequently described as insufficient (Mooney et al., 2003; Pierce et al.). J. Wood (2006) noted that the effect of anxiety over time on academic outcomes had not been assessed. Pierce et al. stated that nearly three quarters of the studies they reviewed implemented single-subject designs. They found that subjective evaluation, which used the opinions of experts or teachers or parents to evaluate, was the only type of social validity data reported and none of the
studies reviewed compared the results of the students to their peer group. The literature criticized sampling procedures. Some studies measured achievement according to a single sample at a single point in time (Skiba & Casey, 1985). When achievement was measured, often brief screening instruments were used that did not describe student performance within specific academic skill sets, such as in reading comprehension or in mathematical reasoning. This practice was challenged by Trout Nordness et al. (2003), as it made it difficult to describe specific strengths and weaknesses. Use of curriculum-based measures was suggested by some as an alternative or preferred method to assess students’ achievement in relation to the content delivered in the classroom (Barnett et al., 2006). Use of more extensive studies or longitudinal studies was also recommended “which would increase the understanding of the developmental pathways of underachievement, help target interventions, and allow for an assessment of service utilization and the outcomes of treatment” (Trout, Nordness et al., p. 208).

The intervention research for students with E/BD was recognized as being insufficient (Gulchak & Lopes, 2007; K. L. Lane, Carter, Pierson, & Glaeser, 2006; Rivera, Al-Otaiba, & Koorland, 2006) and as having significant flaws in procedure and in the way in which results were reported (G. J. Benner et al., 2002; Gunter & Denny, 1998; Ruhl & Berlinghoff, 1992; Skiba & Casey, 1985; Trout, Nordness et al., 2003; Schoenfeld & Janney, 2006). For example, two reviews on reading interventions for students with E/BD noted that the quality of reporting would make many studies nearly impossible to replicate (Mooney, Denny, & Gunter, 2004; Mooney et al., 2003). Much of the research on students with E/BD was recognized as not having the rigor evident in other areas such as learning disabilities and as being inattentive to “identifying types, intensities, dose, or quality of preventive or treatment services in schools” so whether the services provided in school were actually effective was largely unknown (Rones & Hoagwood, 2000, p. 223). Hoagwood, Jensen, Petti, and Burns (1996) stated in their review of over 400 studies of psychotherapy on the E/BD population that “fewer than a dozen outcome studies have investigated the effectiveness outside the research settings” (p. 1056). They called for researchers to address “questions of context, impact of what, for whom, under what circumstances in relationship to what goal” (p. 1057). Research needed to determine whether a practice was effective, for whom it was effective, and in what context the practice occurred (Guerra, Boxer, & Cook, 2006). Student and context differences needed to be considered as they would have significant implications on the application of research-based interventions to classroom practices (E. M. Z. Farmer & T. W. Farmer, 2000; Guerra et al.; Schoenfeld & Janney, 2008). Wehby et al. (1998) suggested that focus needed to happen on the day-to-day teacher behaviour of teachers who worked with students with E/BD.

Research related to students with E/BD was also recognized for having many “voices” and participants minimized or ignored such as the voices of the children and youth or their families (Tarico, Low, Trupin, & Forsyth-Stephens, 1989). Tarico et al. suggested that the parent voice be used “to describe the progression of a child's problems, the kinds of services sought, and the barriers to service delivery that might be overlooked by provider-experts” as “they alone know about informal assistance and social support or the impact of a child's disturbance on the rest of the family” (p. 311).
Driessen, Smit, and Sleegers (2004) noted the need for other perspectives in research as most research was defined and studied from the perspective of the school concerning parent school involvement and there needed to be more research on parental involvement from the perspective of parents. Although there was a growing emphasis on family participation, according to Kerbs (2007), the research base remained undeveloped and the role that family participation played in treatment outcomes was unknown. Stodden, Dowrick, Gilmore, and Galloway (2000) described this as “a circumstance that is indicative of the pervasive deficit-based approach of providing service to those with disabilities, as opposed to collaborating with such individuals and families, as experts of their own abilities, to create effective strength-based supports” (n.p.). Treatment outcomes for minority children were also described to be missing (Dulmus & Rapp-Paglicci, 2000), and intervention studies were needed that considered context such as high poverty level areas, student with high mobility, and violent contexts. As there were significant differences in the findings, further studies needed to assess differences by age or grade across a wider span (H. Cooper, Lindsay, & Nye, 2000). Interventions that emanated from various philosophic stances such as democratic or humanistic theories were also noted to be lacking (Faris-Cole, 2002).

1.9 Limitations of the Study

Several limitations to this study exist. As the study took place in one school district in BC, it does not necessarily represent the geographic diversity of BC from locales that are predominantly urban or rural or from districts that have significant numbers of students from diverse cultures. Service types and availability may also vary in different locales. Although criteria for identification by school systems are consistent throughout BC, there may be procedural differences in the implementation of the policies used to identify students with E/BD. Another limitation is that the study provides a “snapshot” of the students who were identified as needing and receiving a moderate or advanced level of extra service in one school district because of their behaviours. It therefore does not capture information about the services received by students who were previously identified with E/BD in the district but who moved elsewhere or about children and youth who resided in the district catchment but were not currently attending school or who attended private schools or schools outside of the district. Still another limitation is that the study reports information from the student support services office, predominantly from the students’ district files that are maintained for reporting to the Ministry of Education. As such, it may not collect all relevant information as families do not necessarily share all information with schools and schools do not necessarily provide all relevant information to the district’s support services office. As references to medical diagnoses were only included if the diagnoses were stated in medical reports or in letters from medical practitioners, and descriptions of behaviours were only those included in the district’s files, the information documented is accurate but it is not necessarily complete. Where references to hospitals were included, the specific professionals seen at these institutions were not separately identified and therefore some students were
served by a significantly greater number of professionals than would be suggested by the reference to an institution.

1.10 Organization of the Study

The remaining chapters are organized as follows: In Chapter 2, the relevant research that informs this work is reviewed. The chapter is organized into the following three strands: emotional and/or behavioural disorders; family and community; and learning and schooling. Each strand gives research information that helps with the understanding of the nature of students with E/BD and their school success so that the research findings can be compared to existing literature. Chapter 3 presents the research methodology for this case study. Chapter 4 presents the research findings. Chapter 5 provides recommendations that result from the study.
2: THE LITERATURE REVIEW

Chapter 2 presents a review of the literature important to understanding the factors that influence the grade-to-grade transition and graduation of high school students with E/BD. The chapter is divided into three subsections. The first subsection presents an overview of mental health in children and youth as a continuum from those who are mentally healthy to those who have mental health disorders that significantly impact them at home, at school, and in the community. The second subsection provides an overview of the family and community factors that influence the school success of students with E/BD. Described are: family structure; parenting practices; family challenges; family socioeconomic factors including poverty; family-school influences; family-school-community influences; and community influences. The third subsection describes students with E/BD from an educational perspective. It begins by examining the lack of success students with E/BD have in grade-to-grade transitioning and graduating from high school. It then explores their cognitive, language, and achievement profiles as well as other issues which affect their learning and school success. The chapter concludes by describing the school system's response to educating students with E/BD, and the students' trajectories towards either educational success or lack of school completion.

2.1 Overview of Mental Health in Children and Youth

2.1.1 Mentally Healthy Children and Youth

In order to understand the nature of children and youth with E/BD, it is important to understand the nature of mentally healthy children and youth. This facilitates a shift from deficit thinking that focuses on labels such as "mental illness" and "behaviour disorders", to thinking that focuses on the qualities or assets this population needs to develop further (Dulmus & Rapp-Paglicci, 2000). Utilizing this frame, mentally healthy children and youth are described as having sufficient levels of subjective well-being as opposed to the absence of mental illness (Keyes, 1998). As mentally healthy children and youth change as they develop, definitions of mental health for them reflect their increasing biological, psychological, cognitive, and social capacities, as well as their resources and resilience so that they can successfully develop, and effectively cope with changes to both their mental and physical functioning (Spear, 2000; Stephens, Dulberg, & Joubert, 1999). As a result of their mental health, they can successfully deal with the events, challenges, and stresses they encounter in their day-to-day lives (The Public Health Agency of Canada website). They can also achieve expected developmental cognitive, social, and emotional milestones, and attain secure attachments as well as satisfying social relationships (The U.S. Department of Health and Human Services,
Mentally healthy children and youth exhibit specific characteristics. Kalnins, Jutras, Normandeau, and Morin (1998) described the mentally healthy individual as having:

- happiness and a positive orientation toward life;
- an adequate and realistic sense of personal power;
- a belief in their personal competence or efficacy;
- the motivation to direct behavior toward personally relevant goals;
- the ability to cope with stress and frustration;
- the intellectual capacity, problem-solving skills, decision-making skills, and creativity to be involved in personally meaningful activities and achieve or actualize in leisure, school, or work settings; as well as
- the ability to foster interpersonal relationships, help others, and make themselves feel good or relaxed.

Ryff and Keyes (1995) described mentally healthy individuals as having: a positive evaluation of themselves and their past life; a sense of continued growth and development as a person; a belief that their life is purposeful and meaningful; intimate relationships; the capacity to effectively manage their life and surrounding world, and a sense of self-determination. Keyes (1998) later added having: a sense of belongingness; a sense of value to society; a sensibility and meaningfulness of the social world; a sense of potential for continued growth in social institutions and society; and a degree of comfort and acceptance of other people. These attributes of mentally healthy individuals are useful as a framework to describe the mental health/wellness of students. They are also useful to assess areas in which growth is needed, and to establish goals for intervention.

### 2.1.2 The Continuum of Mental Health Described

Mental health in children and youth exists on a continuum from those who are mentally healthy to those who have emotional or behavioural disorders that significantly impact them at home, at school, and in the community. Between these extremes are individuals who are neither mentally healthy nor mentally unwell but who can be described as having vulnerabilities, or as being “at risk”. Determining what percentage of children and youth fall at specific points along this continuum of mental health is made complex by factors such as the age, gender, and context of the subjects, as well as the method and criteria used to select and identify subjects. Most positive results were obtained in a 2003 BC Community Health Survey, which stated that 91% of youth self rated their mental health as excellent or very good and in the subsequent 2005 survey, which stated that 93% of youth self rated their mental health as excellent or very good (Government of Canada. Statistics Canada website). A far less positive result was reported by the American Center for Demographic Policy in 1989. In that year, the center described 40% of young people in the U.S. as experiencing significant
psychosocial problems, as being in “very bad educational shape” and “at risk of failing to fulfill their physical and mental promise” (Hodgkinson, 1989, p. 24).

In an ongoing national survey that focused on the transfer of social and economic capital within families, the mental health status of youth in the U.S was broken down by age grouping (Keyes, 2006). This survey, administered to American youths in 2002-03, derived information by means of a comprehensive set of subjective well-being items. The survey reported that the majority of youth aged 15-18 were not mentally healthy. By adolescence, 40% were mentally healthy; 55% fit the criteria for moderate mental health problems; and 6% were mentally unhealthy or languishing. Nearly half of the youth surveyed were said to be flourishing during their middle school years between ages 12-14 but “moderate mental health was the most prevalent mental health status among adolescents aged 15-18” (Keyes, p. 400).

In a 2005 UNICEF Innocenti Research Centre Report Card (2007) that provided a comprehensive analysis of the mental health of youth, the lives and well-being of Canadian youth were ranked as 12th out of 29 countries. The report card stated that 74% of Canadian youth aged 12-19 were happy and interested in life; 6% of males and 4% of females were depressed; and 29% of males and 26% of females had a high stress level that affected their lives (Stephens et al., 1999). The report card found that self-esteem, mastery, and happiness/interest in life increased with respondents’ amount of formal education. It also found a positive association between the numbers of childhood traumas experienced and lower socioeconomic status, depression, and distress. Amount of current stress was correlated with mental health status as those who were experiencing much stress were 3 times as likely to be depressed and those who were distressed were 4 times as likely to be depressed. The report card found that physical and mental health problems were positively associated and that mental health was relatively poor among youth but it improved with age. A study by Kern (2008) that surveyed adolescents with E/BD found that in comparison to their peers without disabilities, these adolescents self-reported significantly less satisfaction with their overall quality of life as well as with themselves, their relationships, and their environment. It also found that they were more dissatisfied with their level of social inclusion, feelings of belonging, independence, well-being, and self-determination. These reports illustrate the variance in the levels of mental health reported for children and youth. They also reaffirm that youth with E/BD have more difficulties in more areas than do youth overall.

2.1.3 Vulnerability/Risk Factors and Protective/Resiliency Factors

Through protective or resiliency factors children and youth adapt to the vulnerabilities or risks they encounter in their lives. Rutter (1985) characterized these protective factors as modifying, ameliorating, or altering a person’s response to some environmental hazard that predisposed them to a maladaptive outcome. Werner (1989; 1996) described protective factors as the dispositional attributes of individuals that included their activity level and sociability; their having at least average intelligence and competence in communication skills, their having an internal locus of control, and their
having relationships within the family. These protective or resiliency factors provided children and youth with emotional support in times of stress and with external support systems that rewarded their competencies and determination (Sroufe, 1997). They also gave them a belief system by which to live and the capacity “for staying organized in the face of challenge, for active coping and for maintaining positive expectations…in interaction with the environment across successive periods of adaptation,” in changing contexts (Sroufe, p. 256).

Vulnerability identification has been placed on certain children because “unless there is a serious effort to intervene on their behalf, they are prone to experiencing problems throughout their childhood” (Willms, 2002, p. 3). When the vulnerability index developed by Willms (2004) was used to evaluate Canadian children 12 years old or younger, the results suggested that without intervention, almost 29% of children in this age group would be vulnerable to not having the ability to live happy, healthy, confident, and secure lives. Another study, The Canadian National Longitudinal Survey of Children and Youth, followed the development and well-being of Canadian children from birth to early adulthood. It reported that for children in the middle years (6 to 12), about 16% of those identified as vulnerable at one point in time were found to be resilient two years later while 15% of those considered to be resilient encountered negative conditions sufficient enough so that they were identified as vulnerable at a second point in time (Government of Canada. Statistics Canada website). About 13% of Canadian children have been considered vulnerable over the long term (Brink, S. 2000).

2.1.4 Schemes of Risk/Protective Factors

Two schemes are presented here to frame risk and protective factors for children and youth. Patel, Flisher, Hetrick, and McGorry (2007) paired risk factors with their protective factors within biological, psychological, and social domains (Table 1). Within these domains, a lack of mental health can be traced to “complex interactions between psychological, social and biological phenomena, unfolding over time” (Hoagwood, Jensen, Petti, & Burns, 1996, p. 1058).

<table>
<thead>
<tr>
<th>Biological</th>
<th>Risk Factors</th>
<th>Protective Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>exposure to toxins</td>
<td>age-appropriate physical development</td>
</tr>
<tr>
<td></td>
<td>pregnancy related factors</td>
<td>good physical health</td>
</tr>
<tr>
<td></td>
<td>genetic tendency to psychiatric disorder</td>
<td>good intellectual functioning</td>
</tr>
<tr>
<td></td>
<td>head trauma</td>
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<td></td>
<td>birth complications</td>
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<tr>
<td></td>
<td>HIV infection</td>
<td></td>
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<tr>
<td></td>
<td>malnutrition</td>
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<tr>
<td></td>
<td>substance abuse</td>
<td></td>
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<tr>
<td></td>
<td>other illnesses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>learning disorders</td>
<td>ability to learn from experiences</td>
</tr>
</tbody>
</table>

Table 1 Risk and Protective Factors for Mental Health Problems
| Psychological | • maladaptive personality traits | • good self-esteem |
| | • sexual, physical, emotional abuse, and neglect | • high level of problem-solving ability |
| | • difficult temperament | • social skills |
| Social-Community | • transitions (e.g., urbanization) | • connectedness to community |
| | • community disorganization | • opportunities for leisure |
| | • discrimination and marginalization | • positive cultural involvement |
| | • exposure to violence | • connections with community organizations |
| Social-Family | • inconsistent care-giving | • family attachment |
| | • family conflict | • opportunities for positive involvement in family |
| | • poor family discipline | • rewards for involvement in family |
| | • poor family management | • opportunities for involvement in school life |
| Social-School | • academic failure | • positive reinforcement from academic achievement |
| | • failure of schools to provide appropriate environment to support attendance and learning; inadequate or inappropriate provision of education | • identification with school or need for educational attainment |
| | • bullying | |

Risk factors specific to children and youth with E/BD were described by Nelson, Stage, Trout, Duppong-Hurley, and M. H. Epstein (2008) as follows:

- **prenatal (i.e., maternal emotional distress, maternal medical problems),**
- **natal (i.e., premature, unusual delivery),**
- **postnatal (i.e., medical problems [breathing problems, umbilical cord around neck, blue color, yellow color], prolonged hospital stay),**
- **externalizing behaviour pattern during early childhood (i.e., overactive, impulsive, stubborn, temper outbursts, aggressive, destroyed toys, fearless),**
- **internalizing behaviour pattern during early childhood (i.e., shy or timid, fearful, preferred to be alone, socially withdrawn, cautious, difficulty sleeping),**
- **childhood maladjustment (i.e., psychiatric hospitalization, runaway, physically abusive to others, abusive to animals),**
- **childhood maltreatment (i.e., sexually abused, physically abused),**
- **antisocial and psychiatric family history (i.e., domestic violence, mental illness, psychiatric hospitalisation, substance abuse, substance abuse treatment, convicted of a crime),**
- **family structure (i.e., one parent, no high school diploma) and socioeconomic status (i.e., reduced or free lunch) (p.79).**
Family risk factors associated with child psychiatric disorder were described by Rutter, Maughan, Mortimore, Ouston, and Smith (1979) as: severe marital discord, low social status, overcrowding or large family size, paternal criminality, maternal psychiatric disorder, and admission into care of the local authority. A study of Australian children identified a number of familial risk factors for mental health disorders including living “in low-income families with single or step-parents, parents who had left school at an earlier age, and parents who were unemployed” (M. G. Sawyer et al., 2001, p. 809).

In a multiple meta-analyses of risk and protective factors for E/BD across multiple contexts, Crews, Bender, Cook, and Gresham (2007) found that the factors most highly correlated with externalizing behaviour were: a lack of bonding to school, having delinquent peers, and, having an internalizing comorbid disorder. Other contributing factors included: a prior history of antisocial behaviour, low academic achievement, nonsupportive home environments, corporal punishment by parents, and having a controversial sociometric status. Protective factors associated with externalizing behaviour problems were: adequate academic performance, higher age at first juvenile justice commitment, and positive play activities. The two greatest risk factors for internalizing behaviours were: having a chronically ill sibling and having a comorbid externalizing disorder. Other contributing factors included having a controversial sociometric status, having a learning disability, and parental divorce. Protective factors associated with internalizing disorders were: popular sociometric status, having an internal/stable attribution style, and engaging in positive play activities with peers.

2.1.5 Conceptualization of E/BD in Children and Youth

The emotional and behavioural problems of children and youth can be conceptualized as maladaptation, which evolves through successive poor adaptations of persons to their environments (Sroufe, 1997). According to Stroufe, when individuals have a particular adaptational failure, they are placed on a pathway potentially leading to a disorder or toward such a pathway. Along these pathways, individuals are said to “develop richly complex, sophisticated skills” for adapting to their problems which also produce their psychopathology (Fischer et al., 1997, p. 49). Individuals with different adaptational failures can have the same prognosis or outcome and individuals with similar adaptational failures can have different patterns of pathology or adaptation. Changes in developmental challenges or context may lead a person back to more positive functioning but “the longer the maladaptive pathway has been followed (especially in the sense of going across phases of development), the less likely it is that the person will reclaim positive adaptation” (Sroufe, p. 254). The causes for most forms of child psychopathology or adaptational failure are similar to the risk factors described previously. They are: genetic influence; hypo- or hyper-reactive early infant dispositions; insecure child-parent attachments; difficult child behaviour; social-cognitive deficits; deficits in social learning, emotion regulation, impulse control, and response inhibition; neuropsychological and/or neurobiological dysfunction; maladaptive patterns of parenting; parental psychopathology; parental or couple discord; limited family resources
and other poverty-related life stressors; as well as institutional deprivation (Mash & Dozois, 2003).

It is evident from this perspective of childhood problems and psychological disturbance that the events in the lives of children and youth have a considerable influence on their emotional and/or behavioural outcomes. According to Rutter (2000), “there are indications within the fields of both somatic medicine and psychopathology that particular experiences early in life may have enduring effects because they program the way the organism functions and deals with later environments” (p. 397). Specifically, the psychosocial environment has substantial effects on cognitive development with clear-cut evidence that the home environment, school environment, and the peer group are important. Thus, ecological models that understand children’s development within the family, community, culture, physical environment, and society, as well as within the time period in which they live, are useful to conceptualize their mental health (Jutras & Lepage, 2006). In fact, the mental health of children and adolescents is expressed and seen, “in the context of their social environments, that is, family, peer group, and their larger physical and cultural surroundings” (The U.S. Department of Health and Human Services, 1999, p. 123). Throughout the growing years, these environments continue to be important (Clark & Clarke, 1996). As research evidence suggests that many of these contexts can be influenced and that childhood is the optimal time to influence determinants of social and emotional well-being, (Costello, Mustillo, & Erkanli, 2003), it is clear that the primary social environment in which to intervene is the school as it is the primary context in which children develop from early childhood through to late adolescence (E. M. Z. Farmer & T. W. Farmer, 2000).

2.1.6 Prevalence of E/BD

Understanding the prevalence of E/BD in children and youth and the way in which rates are described is important so that the extent of E/BD issues in the school system can be recognized, however describing rates is not straightforward. Rates are

...dependent on the stringency of the criteria used to define the population as well as the nature of the disorder; the age, sex, SES [socioeconomic status], and ethnicity of the child; the criteria used to define the problem; the method used to gather information (e.g., interview, questionnaire); the informant (e.g., child, parent, teacher); [and] sampling considerations (Mash & Dozois, 2003, pp.11-12).

In a review of 52 studies that estimated the prevalence of psychopathology in children and youth aged 1-18 in more than 20 countries, Roberts, Attkisson, and Rosenblatt (1998) found prevalence rates that ranged from approximately 1% to nearly 51%. The mean prevalence in studies conducted in 1970 or before was 15.4%, in studies conducted from 1971-80 it was 14.1%, and in studies conducted from 1981-90 it was 13.8%. Roberts et al. concluded that there was no trend towards increased prevalence from the 1950s onward and that the higher rates of prevalence of psychopathology in
children and youth described in the 1990s may have resulted from the use of both child and parent ratings to gather information.

In Canada, rates of mental health disorder were assessed in 1983 by means of a study of children and youth aged 4-16 in Ontario. This study by Offord and associates utilized a multistage probability sample of households to obtain ratings from parents, teachers, and children/adolescents (Offord, Boyle, Fleming, Blum, & Grant, 1989). Using the Diagnostic and Statistical Manual of Mental Health–III criteria with the Rutter severity criteria, the study determined that the 6 month prevalence rate of mental health disorder (conduct disorder, hyperactivity, emotional disorder, and somatisation) in children and youth was 18.1%. The highest rate was reported for 12-16 year old girls and the lowest rate was reported for 4-11 year old girls. Increased rates of psychiatric disorders were found in children and youth from single parent families, from families living on social assistance or in subsidized housing, and from families with a child suffering from a chronic medical illness.

Four years later, a follow-up study by Offord et al. (1992) found that the strongest predictor of conduct disorder in children aged 8-16 was having been identified with a conduct disorder in the previous study, and almost 45% of the children aged 4-12 with a conduct disorder had subsequently qualified for a conduct disorder, with over 46% of these children having one or more psychiatric disorders. As well, 68.4% of children with one or more disorders in 1987 were free of disorder in the follow-up study. Offord et al. (1996) subsequently described the one year prevalence rate for at least one psychiatric disorder in 15-24 year olds in Ontario as 24.6% for males, and as 24.5% for females. Specific rates were: anxiety disorders (males 11.2%; females 19.5%), affective disorders (males 4.0%; females 7.1%), substance use disorders (males 11.8%; females 3.3%), antisocial behaviours (males 11.8%; females, not reported). A further study by Davidson and Manion (1996), based on the Canadian Mental Health and Illness Survey, suggested that between 17% and 22% of children and youth in Canada suffered from one or more psychiatric disorders and experienced “significant levels of distress, with females and older adolescents at greater risk” (p. 41). This study also found that a higher rate existed for adolescents than for children.

Waddell, Hua, and Shepherd (2002) used six studies conducted elsewhere to ascertain how many children and youth in BC were affected by mental health disorders. They estimated that the prevalence rate for mental disorders causing significant impairment in children and youth less than 18 years of age was 20%, and at any one time, the average community prevalence rate for mental disorders in children and youth in BC, which caused both significant symptoms and significant impairment, was 15%, with 5% experiencing extreme impairment (Waddell et al., 2002). Waddell, McEwan, Shepherd, Offord, and Hua (2005) noted that at any one time, 14% of children aged 4-17 were estimated to experience mental disorders that caused them significant distress and impairment at home, at school, and in the community. More recently, self-reported levels of mental health concerns in BC’s youth were reported by the McCreary Centre Society as obtained through their Adolescent Health Survey III (2003). The McCreary Centre reported that about 8% of students in BC had felt seriously emotionally distressed in the previous month, a figure slightly elevated from the 7% reported in 1998.
and the 6% reported in 1992. In their subsequent 2008 survey of adolescents in BC, 6% of sampled youth felt so much despair in the previous month that they wondered if anything was worthwhile (A. Smith, Stewart, Peled, Poon, & Sawyer, 2009).

Studies undertaken in the U.S. described the prevalence of mental health disorders in children and youth by period of time and kind of disorder. A study of Kindergarten children in the 1980s found that 30% had attentional problems (Beitchman, Nair, Clegg, Ferguson, & Patel, 1986). In the 1990s, studies suggested that approximately 20% of children and adolescents met the diagnostic criteria for a mental disorder currently or in the previous 6 months (Burns et al., 1995; Doll et al., 1993). A survey conducted by the National Institute of Mental Health in 1991-92 noted that from 3-23% of sampled youth met criteria for a severe mental illness or a serious emotional disturbance and from 40-78% had used a mental health service during the year preceding the survey (Narrow et al., 1998). Wittchen, Nelson, and Lachner (1998) reported that anxiety disorders were experienced by 14% of adolescents and young adults aged 14-24. In 1999, the U.S. Surgeon General Report on Mental Health (The United States Public Health Service, 1999) described the Methodology for Epidemiology of Mental Disorders in Children and Adolescents study, which estimated that almost 21% of children in the U.S. had a diagnosable mental or addictive disorder with at least minimum impairment; 11% had significant functional impairment, and 5% had extreme functional impairment. Another study, The Great Smoky Mountains Longitudinal Study, conducted in North Carolina between 1992 and 2003, found that the 3 month prevalence rate for any diagnosis for children and youth aged 9-16 was 13.3%, the rate for any behavioural disorder was 7.0%, and the rate for serious emotional disturbance was 6.8% (Costello, Mustillo, & Erkanli, 2003). This study also found that by the age of 16, 31.0% of females, 42.3% of males, and 36.7% of both genders had experienced a psychiatric disorder. R. E. Roberts, C. R. Roberts, and Xing (2007) examined the rates of disorders in youth aged 11-17. They reported a 17.1% one year prevalence rate for emotional disturbance without impairment, and an 11.1% rate with impairment in at least one area of functioning. They also reported that 6.9% of the youth in their study had anxiety disorders, 6.4% had disruptive disorders, 5.3% had substance abuse disorders, 3% had mood disorders, and 2.1% had ADHD.

The number of children with serious E/BD that interfered with their functioning at home, at school, and in the community was described as lower. Yoe, Santarcangelo, Atkins, and Burchard (1996) reported that from 6-12% of all children met these criteria. Costello, Messer, Bird, Cohen, and Reinherz (1998) reported that from 4.3%-7.4% of students experienced global impairment and from 5.5% -16.9% experienced domain specific impairment. They found slightly higher rates in boys, that poverty doubled risk, and that only 25% students with E/BD had recently received mental health care. Garland et al. (2001) examined the prevalence of psychiatric disorders in youth from five public sectors of care: alcohol and drug services, child welfare, juvenile justice, mental health, and public schools for youths with E/BD. They found that rates of ADHD declined with age whereas rates of conduct disorder increased. In their study, rates of both ADHD and conduct disorder were significantly higher in males than in females but rates of post traumatic stress disorder, separation anxiety, and major depression were
significantly higher in females than in males. Costello, Foley, and Angold (2006) concluded from their review of relevant literature published in the previous 10 years that between 3%-18% of American children had a psychiatric disorder that caused them significant functional impairment. They reported that the rate of serious emotional disturbance was 12% and that “at any time one child in eight has an impairing psychiatric disorder” (p. 978). A study by Jensen et al. (1995) found that the prevalence rate of any disorder in children and youth based on a child interview was 13.6% but the rate was 8.8% if impairment in a life domain (home, school, peers) was considered and it was 7.0% if the rate was determined by the need for mental health treatment. Brandenburg, Friedman, and Silver (1990) suggested that at least 7% of all children and youth may have emotional disorders severe enough to warrant treatment. Others suggested that from 3-6% of children and youth had serious E/BD that hindered healthy development, impeded acquisition of academic, vocational, and social skills; and negatively affected adult adjustment (The U.S. Department of Health and Human Services, 1999). This is the same percentage of school-aged population estimated to be in need of special education and related services because of their E/BD (Kauffman & Landrum, 2009).

Kauffman and Landrum (2009) stated that they did not see it as probable that dramatic increases in the percentage of children and youth with E/BD would occur in the foreseeable future. Conversely, the U.S. Public Health Service reported that the number of youth experiencing E/BD problems was growing, and as long as their issues remained untreated, their problems were said to “pose serious economic and social implications for both the present and future” (Kern, 2008, p. 2). In 2007, Kutcher and Davidson stated that “Mental disorders as a group constitute the largest burden of disease globally” (p. 417) and in that same year, the Canadian Pediatric Society Status Report on Canadian Public Policy and Child and Youth Health warned that, “mental health problems threaten to become the next paediatric epidemic” (2007, p. 2). Thus, the literature predicting future rates of E/BD in children and youth is inconsistent.

Studies that included subjects from outside Canada and the U.S. suggest similar rates of prevalence to those in North America. In Great Britain, the seminal work by Rutter (1989) reported that the prevalence of psychiatric disorder among 14 and 15 year olds was 13% when only parent ratings at the clinical level were taken into consideration, but that the rate increased to 21% when adolescent ratings were added. Brandenburg et al. (1990) reviewed 8 studies from Australia, Norway, the Netherlands, New Zealand, Canada, and the U.S. to ascertain overall prevalence of psychiatric disorders in children and youth as well as their specific disorders, and correlates of their disorders. This review reported that the majority of estimates for disorders ranged from 14 -20% with ranges from16.7% -18.1% in studies in which every individual sampled was assessed through checklists or structured interviews. Brandenburg et al. reported that the prevalence of severe disorders was roughly 7%. Esser, Schmidt, and Woerner (1990) described the prevalence rates for psychiatric disorders in 8-13 year old German children as being in the range of 16-18% with one quarter to one third showing serious disturbances requiring professional treatment. They found that at the younger level, only males were in the seriously affected range, and that the stability rate after 5 years was
approximately 50% but that conduct disorders, in contrast to emotional disorders, were more stable. Adverse familial conditions and specific learning disabilities were correlated with psychiatric disorders at age 8 and learning disabilities were predictive for psychiatric disorders in adolescence. A study conducted in Puerto Rico described 16.4% of children and youth as having one or more disorders, but when global impairment was added, the percentage was reduced to 6.9% (Canino et al., 2004). The study found that males had more disruptive disorders, females had more depressive disorders, and that neither parental education nor income was related to the disorders assessed but that children whose parents were not married were more likely to meet criteria for any studied disorder. A World Health Organization Collaborative Study carried out in four developing countries, Sudan, Philippines, India, and Columbia in 1977 and in 1978 reported that from 12%-29% of all children brought to primary health care facilities had childhood mental health problems (Giel et al., 1981). These authors concluded that between 80% and 90% of childhood mental health problems were consistently missed at the primary health care level in the communities studied.

2.1.7 Types of E/BD Problems

The Western Australian Child Health Survey was undertaken in 1993 to study the physical health, mental health, and well-being of children aged 4-16 in that country (Moon, Rahman, & Bhatia, 1998). Information was collected from a parent or guardian, teachers, and from youth aged 12 years or older (Zubrick et al. 1995). The survey found that 20% of males, 15.4% of females, and 17.7% of both had experienced a mental health problem in the prior six months (M. G. Sawyer et. al, 2000; Zubrick et al.). Of those with mental health problems, 16.0% were in the 4-11 year old range and 20.6% were in the 12-16 year old range; 22% had one behavioural problem, 21% had two types of problems and 47% had three or more types of problems. As measured with the Child Behavior Checklist (Achenbach, 1991), delinquent and thought problems were the most common (Zubrick et al., p. 37; Table 2). This report concluded that if distress, impairment, or the need for professional help were used to determine severity, 52% of the children with identified disorders had problems that were serious.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Western Australian Child Health Survey Prevalence of Disorders in Children by Gender, Age Grouping, and Overall (% of Population)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Males</strong></td>
</tr>
<tr>
<td>Delinquent Problems</td>
<td>10.5</td>
</tr>
<tr>
<td>Thought Problems</td>
<td>9.6</td>
</tr>
<tr>
<td>Attention Problems</td>
<td>6.6</td>
</tr>
<tr>
<td>Social Problems</td>
<td>7.0</td>
</tr>
<tr>
<td>Somatic Complaints</td>
<td>7.0</td>
</tr>
<tr>
<td>Aggressive Behaviour</td>
<td>4.2</td>
</tr>
<tr>
<td>Anxiety/Depression</td>
<td>4.7</td>
</tr>
<tr>
<td>Withdrawn</td>
<td>3.1</td>
</tr>
<tr>
<td>All Mental Health Problems</td>
<td>20.0</td>
</tr>
</tbody>
</table>
In the U.S., prevalence rates of specific disorders in a school special education E/BD population were: ADHD-65.6%; conduct disorder-34.3%; oppositional disorder-22.6%; posttraumatic stress disorder-2.8%; obsessive compulsive disorder-1.4%; panic disorder-0.5%; separation anxiety disorder-7.9%; social phobia-4.6%; and mood disorders including major depression, dysthymia, mania, and hypomania-9.4% (Garland et al., 2001). The behaviours and experiences of children and youth with E/BD served by school special education programs were studied by Wagner, Kutash, Duchnowski, Epstein, and Sumi (2005) who used data from the Special Education Elementary Longitudinal study and the National Longitudinal Transition Study-2, which utilized reports from teachers, schools, the students, and their parents. They noted that 80% of students identified with E/BD in elementary school and 76% of those in secondary school were male. Of the students sampled, 34.4% of those in elementary/middle schools and 38.1% of those in secondary schools came from single parent households. In addition to their E/BD, 64.9% of the elementary/middle school students and 63.1% of the secondary school students were reported by their parents to have ADD or ADHD. Classification for learning disabilities was maintained by 24.9% of the students in elementary/middle school and by 29.9% of the students in secondary school. Approximately 1% of the students were also identified with mental retardation. Programming for the gifted and talented was received by 2.5% of the students in elementary or middle school and by 1.8% of the students in secondary school.

2.1.8 Types of E/BD Problems by Age

The literature suggested that many individuals with E/BD first experienced behaviour problems early on in life. In an analysis based on the U.S. National Longitudinal Transition Study data, the ages of first difficulty for youth designated with E/BD by the school system were as follows: 8.9% before age 1; 11.3% between ages 1 and 4; 41.4% between ages 5 and 8; 22.1% between ages 9 and 12; and 16.2% at age 13 or older (Marder, 1992). As early as Kindergarten, negative ratings of children’s behaviour and quality of teacher-child relationships were predictive of behaviour difficulties through to Grade 8, particularly for males (Hamre & Pianta, 2001). Sometimes problems early on may not have met threshold for diagnoses consistently although issues may have been maintained over time. For example, Lahey et al. (1995) found that only half of males who met diagnostic criteria for a conduct disorder in the first year of their study maintained the criteria in the subsequent year but 88% of the males met the criteria at least once in the subsequent years. They also found that persistence of conduct disorder symptoms was predicted by having parents with an antisocial personality disorder and by having a lower verbal intelligence.

An analysis based on the U.S. based Great Smoky Mountains Study data established the three month rates of disorder with significant impairment in functioning for children and youth aged 9-16 (Costello et al., 2003) (Table 3). This study found that depressive disorders peaked in 9-10 year olds and fell to their lowest level in 12 year olds, the age at which disorders of childhood such as ADHD, separation anxiety disorder, enuresis, encopresis, and tics had nearly disappeared. Rates of disorder then
rose again more slowly after age 12. By adolescence, the rates of depression and social phobia had risen in females. As well, after age 12, there was a significant increase in rates of substance use disorders and a small increase in the rates of panic and generalized anxiety disorders. Significant comorbidity was found between anxiety and depression as well as between oppositional defiant disorder and depression. The disorders with the highest level of continuity were: panic disorders, psychosis, tics, enuresis, encopresis, and substance use disorders. Overall, females showed more continuity than males but there were no significant gender differences in continuity for behavioural or substance use disorders.

Table 3  
Rates of Psychiatric Disorders in Children and Youth Aged 9-16 by Age and Gender from The Great Smoky Mountains Study (% of Population)

<table>
<thead>
<tr>
<th></th>
<th>Ages 9-10</th>
<th>Age 11</th>
<th>Age 12</th>
<th>Age 13</th>
<th>Age 14</th>
<th>Age 15</th>
<th>Age 16</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Diagnosis</td>
<td>19.5</td>
<td>12.7</td>
<td>8.3</td>
<td>12.7</td>
<td>9.7</td>
<td>14.2</td>
<td>12.7</td>
<td>10.6</td>
<td>15.8</td>
</tr>
<tr>
<td>Serious Emotional Disturbance</td>
<td>4.6</td>
<td>3.6</td>
<td>4.6</td>
<td>6.5</td>
<td>6.7</td>
<td>10.5</td>
<td>8.6</td>
<td>5.6.</td>
<td>7.9</td>
</tr>
<tr>
<td>Behaviour Disorder</td>
<td>5.7</td>
<td>4.4</td>
<td>5.3</td>
<td>5.2</td>
<td>6.3</td>
<td>10.0</td>
<td>10.3</td>
<td>4.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Conduct Disorder</td>
<td>2.7</td>
<td>2.1</td>
<td>2.5</td>
<td>3.3</td>
<td>2.8</td>
<td>3.1</td>
<td>1.6</td>
<td>1.2</td>
<td>4.2</td>
</tr>
<tr>
<td>ODD</td>
<td>2.1</td>
<td>1.9</td>
<td>2.1</td>
<td>2.7</td>
<td>3.1</td>
<td>4.1</td>
<td>2.2</td>
<td>2.1.</td>
<td>3.1</td>
</tr>
<tr>
<td>ADHD</td>
<td>2.2</td>
<td>1.4</td>
<td>1.4</td>
<td>0.5</td>
<td>0.3</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
<td>1.5</td>
</tr>
<tr>
<td>SUDs</td>
<td>0</td>
<td>0</td>
<td>0.1</td>
<td>0.3</td>
<td>1.4</td>
<td>5.3</td>
<td>7.6</td>
<td>2.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Anxiety Disorder</td>
<td>4.6</td>
<td>2.6</td>
<td>0.9</td>
<td>2.0</td>
<td>1.8</td>
<td>2.8</td>
<td>1.6</td>
<td>2.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Depressive Disorder</td>
<td>0.5</td>
<td>1.9</td>
<td>0.4</td>
<td>2.6</td>
<td>2.7</td>
<td>3.7</td>
<td>3.1</td>
<td>2.8</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Abbreviations: SUDS refers to substance use disorders; ODD refers to oppositional defiant disorder
Diagnoses included: separation anxiety disorder, generalized anxiety disorder, simple phobia, panic disorder, agoraphobia, major depression, dysthymia, depression not otherwise specified, bipolar disorder, ADHD, conduct disorder, oppositional disorder, anorexia nervosa, bulimia, mania trichotilomania, enuresis, encopresis, SUDs.

In adolescence, some disorders were found to be more common. Mood, impulse-control, anxiety, substance abuse, and eating disorders often first began in adolescence (Kessler et al., 2007). In a study of mental health disorders in high school students in Grades 7-12, Dubow, Lovko, and Kausch (1990) noted that 62% of students reported feelings of depression and 36% experienced suicidal thoughts. In the study, students in Grades 9-12 self-reported significantly more severe levels of physical, psychological, acting-out, and sexual problems. Escalation of depression, suicidal thoughts, anxiety, and substance use occurred between Grades 8 and 9, difficulty with parents soared in Grade 9, and Grade 12 students reported having the fewest problems. Overall, students whose fathers had lower levels of education reported more aggression, school failure, and truancy.
2.1.9  E/BD Described

E/BD can be classified as externalizing or internalizing (Kauffman & Landrum, 2009). Externalizing behaviours, exhibited by about 2-15% of the population (Hinshaw, 1992), are sometimes described as under controlled and are directed outwardly toward the external social environment or others (Achenbach, 1991). They include: defiance; impulsivity; disruptiveness; verbal and physical aggression; antisocial features; and overactivity (Achenbach & Edelbrock, 1978). Internalizing behaviours are described as those directed inwardly toward the individual and include problems such as social withdrawal/isolation, low self-concept, phobias, and depression (Achenbach, 1991).

Externalizing disorders appear to increase, maintain, and decline in various ways as students age. In the United Kingdom, severe conduct disorders were noted to be increasing in successive birth cohorts and to have a high level of stability from late childhood to early adolescence (Patel et al., 2007). The longitudinal course of psychiatric disorders in children aged 4-11 was analyzed by Verhulst, Eussen, Berden, Sanders-Woudstra, and Van Der Ende (1993) who reported that those who persisted in their disorders were more likely to exhibit externalizing behaviours (aggressiveness or antisocial behaviour). The Ontario Child Health Study (Offord et al., 1992) found that of the children aged 4-12 identified with a conduct disorder, 45% still qualified as having conduct disorder four years later and over 46% of this population had one or more psychiatric disorders at the four year point. R. E. Tremblay, Gervais, and Petitclerc (2008) noted that about 5-10% of children maintained highly aggressive behaviours as they progressed from preschool into Kindergarten and beyond. Yet, in a sample of Kindergarten boys who exhibited problem behaviours (physical aggression, opposition, and hyperactivity), less than 5% maintained these high levels of behaviour when they were between 10 and 15 years old (Nagin & Tremblay, 1999). Fite, Colder, Lochman, and Wells (2006) noted that males’ externalizing behaviour was highly stable in Grades 4 and 5 but it declined in Grades 5 and 6, then increased each year thereafter, suggesting that puberty was a time of transition and adjustment. They found that in Grades 5 and 6 some boys who had previously exhibited externalizing behaviour stopped their problematic behaviours, whereas others increased these behaviours. Thus, whereas conduct or aggressive externalizing behaviours were more stable and were maintained over time, many individuals did not maintain these behaviours after puberty and into high school.

Children and youth with externalizing disorders, as compared to those with internalizing disorders, were on average below the mean for academic ability and were referred for and received more special education services (particularly if they were male), had a worse prognosis, and were resistant to most forms of intervention (E. M. Z. Farmer, 1993, 1995; Huesmann, Eron, Lefkowitz, & Walder, 1984; K. L. Lane, Pierson, Robertson, & Little, 2004). In comparison to other students, students with externalizing disorders were more likely to have been placed in low ability groups at school and to have had poor school attendance (Davis, Kruczek, & McIntosh, 2006; E. M. Z. Farmer, 1993, 1995). As well, they were more likely than other students to have come from larger families with less educated parents, to have a father who worked in a lower-class
job, and to have a mother regarded by teachers as being uninterested in their education (E. M. Z. Farmer, 1993, 1995). They were less likely than other students to stay in school and, as a result, they had lower qualifications and poorer education for work entry which resulted in them starting careers, on average, in lower class positions with poorer employment outcomes (E. M. Z. Farmer, 1993, 1995). Those with ADD as well as hyperactivity exhibited impaired relationships with others, lower competence in extra-curricular activities, and lower school performance (Szaatmari, Offord, & Boyle, 1989). Overall, if children with externalizing disorders did not learn to communicate verbally, compromise, and cooperate with others, they were at risk of school and life troubles (R. E. Tremblay et al., 2008).

Students with internalizing behaviours also experienced school related difficulties. Schoenfeld and Janney (2008) reviewed the literature on the prevalence of students with anxiety in the school system and interventions for them. They reported that the prevalence of anxiety disorders within the school E/BD population was consistent with that in the general population and that the four studies on rates of anxiety disorders in children and youth that met their inclusion criteria reported rates of occurrence that ranged from 6.5-21.0%. Students with anxiety disorders experienced educational underachievement, low self-esteem, loneliness, and physical health problems (Dorn et al., 2003; Livingston, Taylor, & Crawford, 1988; Strauss, Frame, & Forehand, 1987; Van Ameringen, Mancini, & Farvolden, 2003). Van Ameringen et al. noted that students with anxiety disorders, particularly those with social phobia, were at risk for underachievement in school and for dropping out of school. They also reported that in a clinical study, about half of the patients meeting diagnosis for an anxiety disorder did not complete school, citing problems such as: speaking in front of the class; feeling too nervous at school and in class; being bored and uninterested in school; and feeling intimidated by teachers and/or peers (Van Ameringen et al.). Major depression was experienced by an estimated 15% of youth before the age of 18 and at any point in time, 3.18% of high school students met criteria for unipolar depression, 3.12% for major depression, and 0.13% for dysthymia (Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993). A study by S. Tremblay, Dahinten, and Kohen (2003) reported that close to 6% of females aged 12-14 had experienced a major depressive episode but the prevalence of depression rose to 11% for females aged 15-17 while the rate for males remained consistent.

Suicidal ideation is another issue facing youth. According to the BC Health Officer’s report, in 2003, 21% of females in BC had seriously considered suicide and 7% had attempted suicide. The McCreary Report (2003) stated that 16% of students in Grades 7-12 in BC self-reported seriously thinking about suicide in the previous year, 11% had planned a suicide; and 10% of females and 4% of males had attempted suicide.

Substance use problems were also found to be common in children and youth. As part of the National Adolescent and Child Treatment Study that examined the problems and outcomes of children and youth aged 8-18 with E/BD, Greenbaum, Prange, Friedman, and Silver (1991) noted that 21.1% had an alcohol disorder or dependency; 32.3% had a marijuana disorder to dependence, and there was a high
degree of comorbidity between alcohol use and marijuana abuse/dependency, with 60% of those with severe alcohol abuse/dependency disorder having severe marijuana abuse/dependency.

2.1.10 Disorder Differences by Gender

There are gender differences in the presentation of some disorders. In various studies, students with externalizing disorders were more often male while those with internalizing disorders were more often female (Bird, Gould, Yager, Staghezza, & Canino, 1989; R. J. Hackett, L. Hackett, Bhakto, & Gowers, 1999; Rescorla et al., 2007). Some disorders such as ADHD, conduct disorder, oppositional defiant disorder, Tourette’s disorder, encopresis, and enuresis were more common in males than females, whereas other disorders such as reactive attachment disorder, selective mutism, most anxiety disorders, adolescent depression, and eating disorders were more common in females than in males (Hartung & Widiger, 1998). Disorders, such as ADHD were found to present differently in males than in females, with females having lower ratings of inattention, less hyperactivity, fewer errors caused by impulsivity, and faster reaction times but being more verbally aggressive, breaking rules less frequently, and exhibiting fewer externalizing behaviours (Abikoff et al., 2002; Barkley, 2003).

2.1.11 Comorbidity

Many students identified with E/BD were found to have comorbid disorders, which is the occurrence of two or more disorders (T. D. Armstrong & Costello, 2002; Randall & Vernberg, 2007). Rates of comorbidity were not found to differ in pattern by gender except that more males than females were diagnosed with conduct/oppositional disorders and ADD (Bird, Gould, & Stagezza, 1993). Rates of comorbidity reported in the literature varied. According to the Mental Health Evaluation and Community Consultation at the University of British Columbia, between two thirds and three quarters of children and youth with mental disorders had comorbid disorders (Waddell, Godderis, Wong, & Garland, 2005). The range given by Cullinan and Epstein (2001) was much wider, from 18% to 75%. This wider range may reflect that rates of comorbidity differ by age of the individuals and sample assessed, as comorbidity in the school E/BD population was found to be higher than in four other service sectors, which was ascribed to the fact that in the school setting there were proportionally more students with ADHD, oppositional defiant disorder and conduct disorder than students with anxiety or mood disorders (Garland et al., 2001). This suggests that comorbidity may be lower for students with an anxiety or mood disorder, yet, when children in five public sectors of care were studied, 26% of those with an anxiety disorder had a comorbid mood disorder and 62% had a disruptive behaviour disorder (Chaviera, Garland, Yeh, McCabe, & Hough, 2008); in a sample of children and youth aged 9-16 in Puerto Rico presented in

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7Costello, Costello, Edelbrock et al., 1988 (18%); Bird, et al., 1993 (46%); Anderson, Williams, McGee & Silva, 1987 (55%); Kashani, Orvaschel, Rosenberg & Reid, 1989 (68% and 75%).
Table 4, comorbidity between conduct/oppositional disorder and depression as well as ADD were particularly high (Bird, Gould, & Stagezza, 1993).

Table 4  Comorbidity Rates in a Sample of Children Aged 9-16 from Puerto Rico

<table>
<thead>
<tr>
<th></th>
<th>ADD</th>
<th>Conduct/Oppositional</th>
<th>Anxiety Disorder</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD</td>
<td>35.7%</td>
<td>22%</td>
<td>47.9%</td>
<td></td>
</tr>
<tr>
<td>Conduct/Oppositional</td>
<td>93.0%</td>
<td>62.4%</td>
<td>82.2%</td>
<td></td>
</tr>
<tr>
<td>Anxiety Disorder</td>
<td>50.8%</td>
<td>55.3%</td>
<td>54.5%</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>26.8%</td>
<td>17.6%</td>
<td>13.2%</td>
<td></td>
</tr>
</tbody>
</table>

In order to determine comorbidity rates for diagnosed mental disorders in the school identified E/BD population, Cullina and Epstein (2001) sampled students identified by their school systems across the U.S. Students were determined to meet the criterion for morbidity when they were rated by teachers as at or above the 90th percentile on an instrument to assess emotional disturbance. The study found that 71.2% of the students met the criteria for comorbidity. This rate did not differ by gender or ethnicity, but both elementary and middle school students exceeded secondary school students for measures of comorbidity, possibly because more students with comorbid disorders had dropped out of school before completing secondary school, thus reducing the rates of comorbidity in the secondary school sample. Students taught in self-contained classes had higher rates of comorbidity than those taught in either separate schools or in general classes. Of students taught in the self-contained classes for students with E/BD, 13.5% had two characteristics; 16.2% had three characteristics; 19.9% had four characteristics and 21.5% were rated at or above the ninetieth percentile on all five characteristics assessed. Comorbidity involving inability to learn was exhibited by 42% of the students. Cullinan and Epstein suggested that students with comorbid disorders may have had more severe and perhaps more obvious disabilities that were recognized by school systems earlier on.

Having comorbid disorders was recognized to increase case complexity and to significantly affect educational, social, and adaptive functioning (Angold, Costello, & Erkanli, 1999; Greenbaum et al., 1991; Kessler, 1994). As students with comorbid disorders have more symptoms, they generally also have more impairment and used more services (Bird et al., 1993). In fact, students with only one diagnosis were found to use services at a similar rate to the population as a whole (Bird et al., 1993). Some combinations of disorders were recognized to cause more difficulties than others. For example, children and youth with hyperactivity-impulsivity-inattention issues as well as conduct problems such as fighting, stealing, truancy, noncompliance, and arguing were described as being at high risk “for developing a lifelong pernicious pattern of antisocial and delinquent behaviour” (Gresham, Lane, & Lambros, 2000, p. 83).
2.2 Understanding the Nature of Students with E/BD through Family and Community

2.2.1 Introduction

All children and youth, including those with E/BD, grow up in the context of their family, neighbourhood, community, country, and the world (Bronfenbrenner, 1979). This section describes the influence of family, neighbourhood, and community on the learning and school success of children and youth with E/BD. Specifically described are: family structure, parenting practices, family challenges, family socioeconomic factors including poverty, and family school relationships.

2.2.2 Defining and Describing Families

Families of children and youth with E/BD have various compositions and descriptions associated with them. Like all families, these families can be headed by “biological or adoptive parents as well as foster parents and their partners, siblings, extended family members (kinship caregivers), and friends who provide a significant level of care and support”, unconditional love, guidance, and nurturance to family members (T. W. Osher & D. M. Osher, 2002, p. 48), as well as take responsibility for the care and welfare of children and youth within the family grouping or family community (Goodwin & King, 2002). In the last three to four decades, families in North America have been characterized as having: parents who work outside of the home, a significant number of single-parent households, parents who do not marry, high mobility, and many children without many adults in their lives (Putnam, 2000). Many families have weak ties with other families, their neighbours, and their relatives (Putnam). Specific characteristics of families of children and youth with E/BD are: families with high rates of divorce, child abuse, and neglect; single parent households; and mental health issues in family members (Barber, Rosenblatt, Harris, & Attkinson, 1992).

Of all children and youth in Canada, in 2006, Statistics Canada reported that 68.6% lived with married-couple families, 15.5% lived with common-law couples and 15.9% lived with one parent. Of the one-parent families, 80% were headed by mothers and 20% by fathers. In BC, in 2003, the McCreary Centre Society reported that 68% of students in Grades 7-12 lived with two parents (including stepparents), 25% lived with one parent, about 3% lived with other adults, 2% were in government care at some time during the previous year, and 1% lived on their own or with other youth. In BC, the British Columbia Office of the Provincial Health Officer (2006) reported that 1.5% of children and youth aged 0-18 were “in care” during the course of a year and, at any one point in time, about 1% of children and youth were “in care”. Of these children, 51.7% were aboriginal. The most recent 2008 BC Adolescent Health Survey from the McCreary Centre Society reported that 90% of youth in Grades 7-12 lived with their mother and/or father, 67% with a parent most of the time, and 14% with both parents but at different times (A. Smith et al., 2009). This report also noted that 3% of youth in
Grades 7-12 had been in government care at some point in their lives (foster, group or youth agreement) and 1% of youth had been “in care” at some time in the previous year.

Of all children and youth in the U.S., the U.S. Bureau of the Census (2008) reported that in 2007, 67.8% of children younger than 18 lived with married parents, 2.9% lived with two unmarried parents, 25.8% lived with one parent (23.2% with their mother), and 3.5% lived with no parent present. Family composition of children and youth in the U.S. classified by the school system as students with E/BD was collected in 1987 by using information from the National Longitudinal Transition Survey. Of the students surveyed, 44.3% of the students identified with E/BD by the school system came from single-parent households (Marder, 1992). Of the students surveyed in the U.S. based Special Education Elementary Longitudinal Study in 2000, and the National Longitudinal Transition Study Two in 2001, 34.4% of elementary school students and 38.1% of secondary school students classified with E/BD lived in single-parent households, a rate higher than the 25.9% of elementary school students and 22.5% of secondary school students in the general population who lived in single-parent households (Wagner et al., 2005). A study by S. Silver et al. (1992) of children and youth aged 8-18 with E/BD who lived in residential schools found that 42.1% lived with one parent, 6.3% lived with other relatives, and 2.8% lived with professional staff. In a study of elementary school boys referred for E/BD placement, 25% lived in single-parent homes and 12% no longer lived with their natural parents (Mattison, Morales, & Bauer, 1992).

Families headed by two biological parents without marital disruption were described as providing the optimal caregiver structure for children and youth. Children and youth growing up in this environment were described to have better academic outcomes (Hetherington, Bridges, & Insabella, 1998; Manning & Lamb, 2003; Sun, 2003), specifically in mathematics (Parcel & Dufur, 2001). Adolescents living with two biological parents were found to receive more encouragement, more monitoring, and more help with their schoolwork than those who lived with single parents or stepparents (Astone & McLanahan, 1991; A. D. Benner, Graham, & Mistry, 2008). When adolescents from traditional two parent homes had well-educated parents, they reported receiving from their parents: more praise and encouragement; more help with homework; more frequent discussions about school; and more frequent parent attendance at school performances or sports events than adolescents from non-traditional or less educated families (Deslandes, Potvin, & Leclerc, 1999). Roberts et al. (2007) found that youths aged 11-17 who lived in two-parent homes were also less likely to have mood, disruptive, or other disorders.

One-parent families were usually headed by mothers and were most often poor (Lipman, Boyle, Dooley, & Offord, 2002). Although children in these one-parent families were more likely than other children to spend time talking to their parents, the time spent talking did not translate into increased academic success, they were parented in a more permissive way, and their homework was monitored less (Astone & McLanahan, 1991). In an analysis of the achievement of middle school students, Sui-Chu and Willms (1996) found that one-parent families were just as involved with their children as higher income and two-parent families but one-parent families did not provide as much home
supervision and parents in these homes participated at school less. The study by Sui-Chu and Willms also found that the high levels of parent-child communication in these homes contained fewer discussions about school activities. A study by Marcon (1999) similarly reported that both one-parent families and lower income families were just as involved in their children’s education as two-parent and more affluent families but when these families were highly involved, their children, especially boys, performed slightly better than other children in one-parent homes. A New Brunswick based study noted that the achievement level of children in one-parent households was lower on average than that in two-parent households by 13% in math; 15% in science, 19% in reading, and 14% in writing (Ma & Klinger, 2000).

Marital transitions and disruptions such as parental death or divorce that changed family composition were found to have an effect on children and youth. In a study of children who had experienced either family death or divorce, Felner, Ginter, Boike, and Cowen (1981) found that these children and youth had overall greater school maladaptation. Those who had experienced divorce showed fewer competencies and those with histories of separation or divorce were rated as having more serious acting out problems. The study also found that children and youth who had experienced the death of a parent had more serious shy-anxious problems. Marital disruption resulting from the dissolution of marriages was also found to be associated with behavioural and affective changes in children and youth, including increased truancy, more negative attitudes to school, early disengagement, and a reduction in the quality of parental involvement (Astone & McLanahan, 1991). A meta-analysis of children and youth who had experienced parental divorce found that as adults, this group had lower levels of well-being, psychological adjustment, and educational attainment, with the greatest effect size for those who remained in one-parent families (Amato & Keith, 1991).

Changes in family composition were found to have detrimental effects on children and youth. When Bray and Berger (1993) analyzed children’s adjustment in stepfamilies and in non-residential parent-child relationships, they found that children who lived in stepfamilies experienced more behaviour problems and stress as well as lower social competency. Kerbs (2007) noted that larger numbers of caregivers in a household positively correlated to higher levels of behaviour problems in the children and youth, as well as with more identified strengths and increased rates of criminal activity. In a study by Hetherington et al. (1998), children who lived in divorced then remarried families were reported to experience more problems and lower psychological well-being than those who lived in families that were intact from the outset. Over 11,000 adolescents with different parent combinations from the National Longitudinal Study of Adolescent Health were analyzed in order to investigate the consequences of family transitions on the well-being of adolescents (S. L. Brown, 2006). Of the sample, 62% of the students lived in stable two-biological-parent families; 92.9% had experienced no marital transition; 19.0% lived with a stable single-mother family, and 7.1% had experienced a transition (S. L. Brown). The study found that moving from a one-parent to a two-parent family was associated with higher levels of delinquency and lower levels of school engagement, whereas moving from a two-parent to a one-parent family was associated with increases in depressive symptoms. Overall, those who had experienced a family
disruption followed by a transition tended to report higher levels of delinquency and depressive systems as well as lower levels of school engagement relative to those who resided with two biological parents, those in stable married stepfamilies, and those in stable single-mother families. In a study by Cherlin and Furstenberg (1994), 25-30% of adolescents who resided in single-mother or stepfamily households were rated as having serious behaviour difficulties as opposed to 10% or fewer of those who lived in nondivorced households. Some children and youth fared better than others with marital disruptions and transitions. According to Hetherington et al. (1998), “Children who have easy temperaments; who are intelligent, socially mature, and responsible; and who exhibit few behaviour problems are better able to cope with their parents' marital transitions” (p. 168). This description appears to make it unlikely that students with E/BD would adapt well to marital disruptions and transitions.

Some children and youth reside “in care”. They are placed in these alternate settings for a variety of reasons including an inability or unwillingness of parent(s) to care for them and/or neglect and/or physical or emotional harm to them by a parent (L. T. Foster & Wharf, 2007; Kohl, Edleson, English, & Barth, 2005). Children and youth “in care” were often found to have histories of instability, dysfunction, mental illness, and maladaptive family relationships (Connor, Doerfler, Toscano, Volungis, & Steingard, 2004; Hussey & Guo, 2005; Zlotnick, Kronstadt, & Klee, 1998). Specifically, these children and youth were found to experience higher rates of anxiety and depression (Turpel-Laford & Kendall, 2007). Children and youth “in care” were described to have rates of common health problems 1.2 -1.4 times greater than other children and youth, to be highly vulnerable for poor health and life outcomes, and to frequently coming from disadvantaged and dysfunctional families with inadequate income as well as drug and alcohol issues (Turpel-Laford & Kendall). Of children and youth in continuing care in BC, 65% were said to experience mental disorders (Turpel-Laford & Kendall). Children and youth “in care” were more likely to:

- have special needs related to E/BD issues (especially males);
- have changed schools more frequently;
- be less likely to graduate from high school within six years of Grade 8 enrolment and to not graduate in the academic stream if they did graduate;
- enter school less prepared to learn;
- fall further behind in school over time;
- be vulnerable on all dimensions of the Early Development Instrument8;
- not acquire fundamental reading, writing, and numeracy skills to meet high school needs;
- be less likely to be assessed through the Foundations Skills Assessment Process9;

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8 The Early Development instrument is a population-based tool developed by Offord and Janus used to measure the state of children’s development at Kindergarten entry (www.earlylearning.ubc.ca/EDI).
9 The Foundations Skills Assessment is an annual province-wide assessment of BC students’ academic skills (http://www.bced.gov.bc.ca/assessment/fsa).
• graduate a grade or more behind their peers and to graduate with lower grade point averages;
• not go to post-secondary education, for those who graduated in the academic stream, and
• drop out of school, especially after age 16 (Turpel-Laford & Kendall).

In the U.S., children and youth who lived "in care" had higher rates of depression, psychiatric disorders, school dropout, and criminal involvement (Blome, 1997; Burns et al., 2004; Clausen, Landsverk, Ganger, Chadwick, & Litrownik, 1998; Zetlin, Weinberg, & Shea, 2006). In a study by Pumariega, Johnson, and Sheridan (1995), over half of high school students “in care” who resided in residential group homes were found to have extremely high mental health needs with scores above cut-off on a depression scale. R. J. Sawyer and Dubowitz (1994) noted that almost 30% of the children in kinship care required and received special education services; 6% had emotional problems; and 41% had been grade retained at least once. Despite having average cognitive abilities and average oral expressive language skills, over one third had poor to very poor listening comprehension skills in comparison to their peers. A study of the school special education files of students with E/BD who were “in care” found that they were at much greater risk for school-related problems than a general population of students with E/BD (Smucker, Kauffman, & Ball, 1996). Particularly described were the greater number of schools they had attended and the greater number of negative comments in their special education files.

Trout et al. (2008) reviewed the literature examining the academic and school functioning of students in out of home care in 29 studies. In the studies reviewed, children and youth “in care” had a mean intelligence of 87.0 with a range from 40 to 192 and 50% had experienced foster care, 47% residential care, 36% kinship care, 25% group homes, and 22% other placements. All but one of the studies reported that one third or more of students in out of home care performed below grade level and none reported a population performing “above average”. Students “in care” had frequently changed schools, 35-57% had been grade retained, and their absence rates ranged from 5.6 to 8.5%. Zima et al. (2000) found that students in out of home care had been suspended or expelled from school more often and had a higher dropout rate than students who lived in family foster care. Outcomes for youth who lived with non-biological families including foster, grandparents, or other relatives were studied by Sun (2003) in the National Education Longitudinal Study of 1988 (NELS). Sun found that in comparison to two-biological parent, single mother, stepfather/male partner, single father or stepmother/female partner families, these youth fared more poorly on measures of academic performance, educational aspiration, locus of control, self-esteem, behaviour problems, and the highest number of cigarettes smoked per day.

Children and youth “in care” who did better educationally than others were better readers; younger when they were in care; were more often “in care” with relatives; did not have a disrupted education; did not have underlying behavioural difficulties; aspired for higher education; and had good problem solving skills (Shin, 2003). Sun (2003) examined children who did not live with their biological parents and found that all variables in the mental health domain except anxiety were significantly correlated with
levels of reading skills with those experiencing higher levels of depression and loss of control having the lowest reading skills. Sun also noted that having received special education services was negatively associated with reading ability while extracurricular activities and positive school experiences were positively associated. When students “in care” received regularly scheduled parental visits, they exhibited fewer externalizing problem behaviours than those who did not receive these visits (Cantos & Gries, 1997). As well, when a wraparound model was used to support children “in care”, placement changes were lower and fewer days of school were missed in comparison to children who had received standard foster care services (Clark, Lee, Prange, & McDonald, 1996). Protective factors for youth “in care” were: having a sense of competence, having goals for the future, having social support, being involved in community service activities, having an opportunity to positively contribute to others, and having nourishing supportive relationships with caring adults (Hass & Graydon, 2009). According to Hass and Graydon, youth “in care” who were academically successful were more intelligent, more goal oriented, more determined, and more disciplined. They also had high aspirations and had individuals in their lives (most frequently teachers) who were role models for them.

2.2.3 Parenting Children and Youth with E/BD

Many families of individuals with E/BD “play an essential, sometimes lifesaving role” for them and almost 60% of families in Canada living with individuals with serious mental illness are their primary caregivers, usually with little guidance, support, relief or respite from very early on in their illness (The Canadian Standing Senate Committee on Social Affairs, Science And Technology, 2006, p.16). As the onset of mental illness can happen when individuals are quite young, this extensive parenting role can begin early and it can last a long time. In fact, The U.S. Surgeon General’s Conference on Children’s Mental Health stated that 74% of 21 year olds diagnosed with mental disorders in that country had a history of mental health problems from early childhood (The United States Department of Education, 2001). Parenting these children and youth was described as extensive and demanding, yet, these parents were expected to address the emotional, financial, and educational responsibilities associated with their children as a part of the normal parenting process (Angold et al., 1998; Hoover-Dempsy & Sandler, 1997).

Parenting adolescents, particularly those with E/BD, is often described as particularly challenging. By the time children have reached adolescence, they and their parents have established ways in which they deal with each other which then shift (Montemayor & Flannery, 1990). In adolescence, it is considered normal for youth to gain more autonomy from parents; expand social relationships with peers; forge new identities that are differentiated and separate from their parents; and make new decisions about lifestyle preferences (Delgado-Gaitan, 1991). Whereas parents of youth without E/BD decreased their supervision of their youth in adolescence, parents of adolescents with E/BD often needed to provide their youth with additional supervision, support, and involvement in order to maintain them successfully at home, school, and in
the community (Comer 1984). These parents also often experienced magnified parent-adolescent conflicts. In evidence, Reed and Dubow (1997) noted that youth who used mental health services were significantly more likely to have lower rates of positive communication and higher rates of negative communication with their parents, and these conflicts were both more frequent and more intense than the parent and adolescent conflicts of youth who did not receive mental health services. Yet, when disciplined, youth with E/BD may not have responded appropriately. Ambert (1997) noted that when parents reprimanded “normal” youth, oppositional behaviour often decreased, whereas it was often exacerbated in behaviour-disordered youth. Sometimes a behaviour cycle ensued where the youth’s aggressive behaviour elicited harsh parenting which then resulted in more misbehaviour from the youth (G. R. Patterson, Bank, & Stoolmiller, 1990). Thus, although the parents of adolescents with E/BD may have been more involved in parenting, this involvement may have been ineffective and may have resulted in worsened behaviour.

The parenting of males with externalizing behaviour was examined by Fite et al. (2006). They found that the behaviour of Grade 4-8 boys influenced poor parental monitoring in Grades 5 and 6, and inconsistent discipline above and beyond prior levels of parenting at all grades. They also found that parenting behaviours did not influence the boys’ behaviour at any of the grade levels, suggesting that for high-risk boys, their externalizing behaviour was independent of parenting practices during the developmental period between Grades 4-8. Fite et al. did find that higher levels of boys’ externalizing behaviour in Grades 6-7 were associated with increased levels of poor parental monitoring. They suggested that boys with high levels of behaviour problems may have elicited inconsistent discipline from their parents because their parents were constantly changing parenting behaviours to try to find management strategies that worked, which, in turn, may have led to their not following through with discipline. Also suggested by Henry (2000) was that behaviour intervention to assist parents would best be concentrated on younger children, particularly at school entry.

The impact of parenting a child or youth with E/BD on a family’s social, academic, and family functioning is considerable and is considered a morbidity factor (American Academy of Pediatrics, Committee on Psychosocial Aspects of Child and Family Health, 2001). Parents of children and youth with E/BD are described as experiencing both objective burden (e.g., providing transportation or assisting with daily tasks), and subjective burden (e.g., worry) (Angold, Messer et al., 1998). In a longitudinal study, Angold et al. (1998) found that 10.7% of all parents of children aged 9-11 reported at least one perceived burden resulting from their child’s symptoms and 38.8% of parents whose children had both a mental health diagnosis and a resultant impairment reported at least one perceived burden. The more severe the mental health symptoms and the more impaired the child, the more elevated was the caregiver distress but the level of stress reduced when the child’s symptoms reduced (Brannan & Heflinger, 2001). Increased caregiver strain was also positively associated with an increase of services received by the child or youth (Angold, Messer et al., 1998; Brannan, Heflinger, & Foster, 2003; E. M. Z. Farmer, Burns, Angold, & Costello, 1997). Parental feelings of tiredness, sadness, and guilt from caregiver strain were also found

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to affect parental involvement in a child or youth’s life at home, at school, and in the community. Brannan et al. (2003) noted that the added strain of caring for a child with difficult and disruptive symptoms was associated with: (1) severe marital discord, (2) low socioeconomic status, (3) overcrowding in living facilities, (4) paternal criminality, (5) maternal psychiatric disorder, and (6) foster-home placement of the child.

Whereas the provision of love, guidance, care, support, and nurturance are hoped for in families, many parents and family members who take responsibility for children with E/BD have their own challenges besides parenting a child with E/BD. Some of these parents were found to have coped well with negative life changes but others were found to have experienced negative effects from significant disruption and distress (Hetherington et al., 1998), as well as depression, anxiety, irritability, antisocial behaviours, and stress-related health problems (Capaldi & Patterson, 1991; Hetherington, 1989; Kiecolt-Glaser et al., 1987). Maternal depression was specifically recognized as being significantly associated with children’s social and psychiatric difficulties (Downey & Coyne, 1990), and depressed mothers were found to be less involved at their children’s schools than nondepressed mothers (Hill & Taylor, 2004). Maternal antisocial behaviour was found to be positively associated with greater numbers of caregiver transitions, and boys who had experienced two or more caregiver transitions had more delinquent behaviours in that they had 3 times as many arrests as boys who had experienced none or one transition (Capaldi & Patterson, 1991).

For many mental disorders, the genetic predisposition from a family history of psychopathology was found to be a contributing factor although environmental factors were also identified as precipitating or delaying onset, and each diagnosis was thought to have its own risk and protective factors (Capaldi & Patterson, 1991; Dulmus & Rapp-Paglicci, 2000). According to Rutter, family environmental factors have an effect on children and youth but it is not clear...

...how far the risks derive from unresolved conflict and discord, from inept parenting, from deficiencies in social problem solving, from models of violence and lack of impulse control, from inadequacies in parental supervision, from a lack of committed individualized positive parent-child relationships, or from a number of other associated risk factors (Rutter, 2000, pp. 385-386).

Identified risk factors for externalizing behaviour problems in children and youth included maternal stress and harsh parenting practices; risk factors identified as contributing to internalizing behaviour problems included having no older siblings, maternal stress, anxiety, harsh parental discipline, single parent homes, and parental conflict by age three (Bayer, Hiscock, Ukoumunne, Price, & Wake, 2008). Whereas sensitive, responsive, involved, proactive, and structured caregiving for children from birth to five years has been associated with positive socio-emotional adjustment, parenting characterized as neglectful, harsh, distant, punitive, intrusive, and reactive has been associated with child maladjustment (Shaw, 2006). For young children with a genetic disposition towards externalizing behaviour, “parent-child interactions coloured by
hostility, rejection, and intrusion were more likely to place young children, already prone to conflict initiations and aggression, on a trajectory toward externalizing outcomes" (Rubin, Burgess, Dwyer, & Hastings, 2003, p. 174). In contrast, parents who were warm, sensitive, and provided guidance may have avoided placing their children on this pathway. Aggression is also a characteristic described to be perpetuated within families, as aggressive individuals were found more likely to marry other aggressive individuals and to raise aggressive children (Huesmann et al., 1984).

Children who experienced recurrent abuse or neglect or who regularly witnessed domestic violence or who lived with parents who had mental health or substance abuse problems were found to be particularly vulnerable to mental health problems (The National Scientific Council on the Developing Child, 2008). If students had experienced violence, they were found more likely to have difficulty getting along with others socially, and they were more likely to be rejected more by peers, to repress their feelings, to regress to an earlier stage of development, to have more difficulty learning, to achieve lower grades on classroom and standardized tests, and, to achieve lower on cognitive tests (Delaney-Black et al., 2002; Dishion, 1990; Wallach, 1994). Those who had experienced physical abuse were more likely to achieve lower scores on tests of cognitive ability (Cicchetti & Toth, 1995). In a study that explored the relationship between punitive environmental influences and the reading of twin 13 year olds, J. Stevenson and Fredman (1990) reported that children who had experienced less parental warmth and higher levels of criticism, particularly those who had experienced much criticism and hostile feelings from their mothers, presented with poor reading and spelling. When intelligence was controlled, there was a 12 month lag between the reading ages of children who had experienced criticism and hostility in comparison to children who had not. In another study by Dishion (1990), children who were more aggressive and had more academic problems at school were more likely to have had parents who were critical in their discipline. Conversely, parents who provided more affective support and acceptance had children who achieved better in school (Deslandes, Royer, Turcotte, & Bertrand, 1997). In a study of children who were abused and neglected, 43% had experienced declines in their grade point averages that rose dramatically after age 14, 32% of those who reached age 16 dropped out of school, almost 47% had been grade retained, and almost 24% were placed in special programs in school (Leiter & Johnson, 1997). Of the students sampled, Leiter and Johnson found that recent maltreatment and earlier age at first maltreatment (particularly neglect) were significant for performance declines and that the declines accelerated in adolescence. Maltreated children were found to experience significantly more discipline referrals and suspensions in school, in contrast to neglected children who achieved lower academically (Eckenrode, Laird, & Doris, 1993). If maltreatment was chronic, extreme, and/or uncontrollable, measurable changes were sometimes found to occur in the child’s brain that could have an effect on early learning, exploration, curiosity, school readiness, and later school achievement (De Bellis, et al., 1999; The National Scientific Council on the Developing Child, 2005).

In a study that followed children from age 3 to 8, J. Stevenson, Richman, and Graham (1985) found that social deprivation, which included family dysfunction and an
adverse family environment at age 3, predicted later learning and behaviour problems. The study found that when mothers suffered from depression or anxiety, their children were more likely to have reading problems not explainable by low intelligence. They speculated that early language delays enhanced the relationship between family variables and future reading problems. In a study by Allen and Oliver (1982), neglected preschool children scored lower on receptive and expressive language tests than did either physically abused or nonmaltreated children. These neglected Kindergarten children were rated as poorer in social, emotional, and academic functioning than children who had experienced other kinds of maltreatment (Eckenrode et al., 1993). Maltreated students also scored significantly below their non-maltreated peers in reading and math and were 2.5 times more likely to repeat a grade, findings that did not hold for sexually abused children who did not exhibit academic achievement delays.

Another family influence on school outcomes was the high rate of mobility of some families that resulted in children and youth from these families changing schools frequently. Haveman, Wolfe, and Spaulding (1991) reported that family moves that occurred when children were younger had a greater impact on later school dropout than did family moves in high school. According to these researchers, predictors of later school dropout were: changing schools in Grade 1, having parents with problematic attitudes or having changes in childcare arrangements over the summer between Grades 1 and 2. Students with E/BD were also found to have attended a greater number of schools than other students. In a national study of students with disabilities, Wagner et al. (2005) reported that 33.9% of elementary/middle school children and 65.4% of secondary students with E/BD had attended four or more schools since starting school. For 20.9% of the children in middle school and 13.4% of youth in secondary school, their most recent school change had resulted from family mobility. Thus, many family adversities or stress-inducing experiences were found to have a detrimental effect on children and youth, increasing the likelihood that they experienced significant mental health problems later in life (Garmezy, 1993; The National Scientific Council on the Developing Child, 2008). Yet, when family situations improved from reduced life demands, improved family relationships, improved school-family interactions, and increased school involvement, the experiences for children and youth were likely to improve as well (J. L. Epstein, 1995; Henderson & Mapp, 2002; Hill & Taylor, 2004; Hoover-Dempsey & Sandler, 1997).

2.2.4 The Parent’s Management Style

Parent management styles help to shape the behaviour of children and youth and have been associated with success in school (Amato & Keith, 1991). A review of studies by Amato and Fowler (2002) stated that “parental support, monitoring, and avoidance of harsh punishment are associated with positive outcomes among children, including higher school grades, fewer behaviour problems, less substance use, better mental health, greater social competence, and more positive self-concepts” (2002, p. 704). They concluded that for children from preschool to college age...
...children appear to do best when parents are warm and supportive, spend generous amounts of time with children, monitor children's behaviour, and expect children to follow rules, encourage open communication, and react to misbehaviour with discussion rather than harsh punishment (p.704).

When parents were not restrictive and hostile, nor psychologically and behaviourally controlling, but were instead accepting and encouraging their children were found to be more academically successful and competent (Lakshmi & Arora, 2006).

The management styles of parents are described in Baumrind's typology as authoritarian, permissive, and authoritative (1966). An authoritarian parent shapes, controls, and evaluates the behaviour and attitudes of the child in accordance with a set standard of conduct, usually an absolute standard, and the parent forcefully takes measures to curb self-will (1966; 1968). Permissive parents are very accepting of their children, make few demands for mature behaviour, and allow children to self-regulate. Authoritative parents set clear standards for mature behaviour for their children, enforce rules and standards while encouraging their children to be independent and to have open communications with them. These parents behave in a nonpunitive, accepting, and affirmative manner toward their children's impulses, desires, and actions, using reason and manipulation to accomplish parenting.

Authoritarian and authoritative parenting styles have been positively associated with better grades across gender, age, parental education, and family structure categories, whereas permissive parenting has been associated with both low social and cognitive competence (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987). If parents were authoritarian or were both authoritarian and permissive, their children were found to have lower grades with the rationale being that "inconsistency in the home environment creates anxiety among children and that anxiety reduces the relationship between the student's effort in school and the grade received" (Dornbusch et al., p. 1255). Inconsistent communication from parents was associated with a lower correlation between hours of homework and grades received by their children. Dekovic and Janssens (1992) noted that whereas parents of popular children were more likely authoritative/democratic in their style of interacting with their children, parents of rejected children tended to be more authoritarian/restrictive, displayed fewer positive emotions in response to their children, and were more likely to criticize their children's personal functioning. Parents who used an authoritative parenting style expected mature behaviour from their children and set clear standards which included firm enforcement of rules with use of commands and sanctions. They encouraged independence and individuality as well open communication between their children and them, with verbal give and take. This style of parenting was associated with girls being more socially responsible and more independent, and boys having average independence. At ages 8 and 9, both boys and girls in these homes were found to be socially and cognitively competent. According to Hess and McDevitt (1984), the effects of parental control processes persisted in school performance to age 12, thereby contributing positively to both their behavioural and academic success.
2.2.5 Socioeconomic Factors

Children and youth with E/BD come from families with varying social and economic circumstances. These circumstances, such as the family’s income, social status in the community, neighbourhood lived in, as well as the parents’ education level and occupations were found to contribute to variance in school success for children and youth, and were found to relate to both social and emotional well-being in that those in better circumstances did better (Ainsworth, 2002; Brooks-Gunn & Duncan, 1997; Gorard, Fitz, & Taylor, 2001; Ma & Klinger, 2000; Richman, Stevenson, & Graham, 1975). The positive effects of living in higher status homes and in higher socioeconomic neighbourhoods were found to emerge early and were found to be a consistent, if not an increasing influence on students in the intermediate and secondary grades (Achenbach, Hensley, Phares, & Grayson, 1990; S. W. Duncan, 1994; McLeod & Shanahan, 1993; Sirin, 2005). In a meta-analysis of the literature on the effects of socioeconomic status on academics located in journal articles published between 1990 and 2000, Sirin (2005) found that the positive effects of higher socioeconomic status were strongest for math achievement as compared to verbal and science achievement. Sirin also stated that as students who did poorly in elementary school because of their family socioeconomic status were more likely to drop out of school, these students may not even have been represented in research samples that assessed the impact of socioeconomic status on children and youth in high school. The positive effects of higher socioeconomic status included better reading achievement (Ainsworth, 2002; Eamon, 2005). Data from the Youth in Transition survey and the Organization for Economic Co-Operation and Development Programme for International Student Assessment (PISA), found that students from high socioeconomic status families achieved better in reading even when school characteristics were controlled. As well, greater levels of parental education, higher parental expectations, greater family educational support, and parents’ interest in academics were predictors of better reading achievement (Frempong, Ma, & Archampon, 2006).

Although higher parental education was found to be positively correlated to both children’s home learning and family social class, the parent’s level of education was found to be the critical factor (S. Lee, 1994). The education level of mothers, in particular, was found to predict more of the variance in student achievement than other family factors for students at lower grade levels (D. L. Stevenson & Baker, 1987). Higher socioeconomic status families had more educated parents and more two-parent families which, in turn, were related to better neighbourhoods (E. P. Smith et al., 1997). The more educated parents who had a higher income may also have been more involved in their children’s education (Eccles & Harold, 1996; Fehrmann, Keith, & Reimers, 1987; Lareau, 1987) and they may have spent more time on homework with their children than did less educated and poorer parents, thereby positively affecting their children’s grades (Fehrmann et al.). Bacete and Rodriguez (2004) found that students from high socioeconomic status families had parents who were more involved with their children and these parents had more intellectual ability, whereas, for students from low and middle socioeconomic status families, the students’ high intellectual ability
was the single predictor of high academic grades. Special education students who were from higher socioeconomic status families were found to be absent from school significantly less often than students from lower socioeconomic status families, which gave students from the higher socioeconomic status families more opportunity for learning to take place at school (Wagner, 1991).

Children and youth from lower socioeconomic status families were found to do less well in school and they had higher rates of mental health disorders and behaviour problems than did students from higher socioeconomic status families. They were found to experience academic and social failure at a rate higher than their peers who were not poor, right from the earliest grades onward (Coleman & Vaughn, 2000). In the U.S., a national longitudinal transition study found that 33% of students with E/BD had parents with less than 12 years of education, supporting the relationship between lower levels of parental education and higher rates of E/BD in children and youth (Marder, 1992). Students from lower socioeconomic status families were also found to experience more interactions that were negative with teachers and they received more punishment as well as less academic time with them (Nelson, Johnson, & Marchand-Martella, 1996; Scott, Nelson, & Liaupsin, 2001). Children and youth from lower socioeconomic status families were found to have a higher prevalence of externalizing problems such as conduct disorder, delinquent behaviours, aggressive behaviours, schizophrenia, and antisocial personality disorder (Dearing, McCartney, & Taylor, 2006; G. J. Duncan, Brooks-Gunn, & Klebanov, 1994; Lahey et al., 1995; Szatmari, Offord, & Boyle, 1989). Dearing et al. noted that externalizing problems in children increased with the lowering of family income and diminished when the family income was relatively high. Children and youth from lower socioeconomic status families were also found to have a higher prevalence of internalizing problems (R. H. Bradley & Corwyn, 2002; Brooks-Gunn & Duncan, 1997; Costello et al., 2003) such as depression (Dearing et al.; Dornfeld & Kruttschnitt, 1992; G. J. Duncan et al., 1994; Goodman, 1999; Goodman, Slap, & Huang, 2003) and anxiety (Brooks-Gunn & Duncan). In a study conducted by Xue, Leventhal, Brooks-Gunn, and Earls (2005), children aged 5-11 in Chicago were surveyed for internalizing behaviour problems (depression, anxiety, withdrawal, and somatic problems). The study found that 21.4% of children from low socioeconomic status neighbourhoods scored above the clinical threshold for disorders, whereas only 18.3% of children from medium socioeconomic status neighbourhoods, and 11.5% of children from high socioeconomic status neighbourhoods scored in this range. Findings were not all consistent as one study did not find higher rates of aggressiveness or delinquency in individuals from lower socioeconomic status families (McCoy, Firk, Looney, & Ellis, 1999), and another study did not find that hyperactivity or inattention occurred at higher rates in children and youth from low income neighbourhoods (Szatmari, Offord et al.).

The literature suggested a number of reasons why lower socioeconomic status was associated with higher mental health and behaviour problems in children and youth. McCoy et al. (1999) postulated that although lower socioeconomic status was inversely related to conduct problems as well as to ineffective parenting practices, the influencing factors were likely the ineffective parenting practices rather than the socioeconomic status itself. Eamon (2002) found that the less cognitively stimulating home
environments of low socioeconomic status families was the mediating factor for the higher levels of school behaviour problems as well as the lower mathematics and reading achievement for children and youth from these homes. When access to stimulating materials was provided to these families, the effects of neighbourhood disadvantage were mediated (R. H. Bradley, Corwyn, McAdoo, & Coll, 2001). The value placed on education, the time spent on education related activities, and the wherewithal to create a cognitively stimulating home environment appeared to be key to making a difference for children and youth from lower socioeconomic status homes.

The literature gave reasons for the low level of parental involvement in their children’s schools by parents from lower socioeconomic status families. First, their values may have differed from the middle class value system of the schools or their view of education may have differed from that presented by schools (Lareau, 1987). Second, schools did not know how to involve these parents with different values and views (Delgado-Gaitan, 1991). Third, these parents may have believed that the education of their children was the responsibility of teachers and not parents (Crozier, 1999; Smrekar & Cohen-Vogel, 2001), while they, their families, and their communities were responsible for supporting relationships, teaching other skills, and providing personal safety to their children (Drummond & Stipek, 2004).

Some actions of lower socioeconomic status families contributed positively to the school success of their children and youth. When lower socioeconomic status parents participated at school and their children attended higher socioeconomic schools, 7% of the difference in parent involvement by socioeconomic level disappeared (Sui-Chu & Willms, 1996). In a longitudinal study of family involvement from Kindergarten to Grade 5, although children of more educated mothers had higher levels of literacy, this gap was nonexistent if family involvement levels were high (Dearing, Kreider, Simpkins, & Weiss, 2006). In another longitudinal study, Comer and Haynes (1991) studied family involvement within children’s school environments and literacy performance from Kindergarten through to Grade 5 in ethnically diverse low-income families. Their study found that although there was no association between average parent involvement and average literacy performance for children whose mothers were relatively more educated, average parent involvement levels between Kindergarten and Grade 5 were positively associated with average literacy performance levels for children whose mothers were relatively less educated. Frequent communication between parents and their children was also found to help overcome neighbourhood disadvantage and this frequent communication with their children was also associated with increased communication with the school, providing extra opportunities for the children from these homes to learn (Catsambis & Beveridge, 2001). The lower education level of parents in lower socioeconomic families was also found to be a mediating factor for anxiety as E. E. Roberts, C. R. Roberts, and Xing (2007) found higher rates of anxiety disorders in youth ages 11-17 who were poor but the odds of having an anxiety disorder increased with lower educated caregivers.

Some neighbourhood characteristics were found to be associated with school and behavioural outcomes. In a study of Canadian preschoolers that examined the association between neighbourhood characteristics as well as verbal and behavioural
competencies, Kohen, Brooks-Gunn, Leventhal, and Hertzman (2002) reported that neighbourhoods with fewer affluent families had children with higher levels of behaviour problem scores on rating instruments compared to children from neighbourhoods with middle-income families, and that males in these neighbourhoods had higher behaviour problem ratings than females. The study found that families headed by single females had children with higher problem behaviour scores, a finding consistent with the literature on family composition. The study also reported that lower neighbourhood disorder was associated with higher receptive vocabulary scores but neighbourhood disorder was not significantly associated with children's behaviour problems. Lower receptive vocabulary scores were associated with neighbourhood poverty and families headed by single females. As the study also found that families with lower levels of maternal education had higher problem behaviour scores, a critical factor may be the parenting practices themselves.

Two ways of understanding the effects of neighbourhood are the “relationship and ties” model and the “norms and collective efficacy model” (Leventhal & Brooks-Gunn, 2004). The “relationship and ties” model suggests that neighbourhood disadvantage and delinquent outcomes are mediated by the parents' behaviours and the home environment. Much of the research that mentions parenting practices, the education level of parents, and the involvement of parents in their children’s education fits this model. The second model, the “norms and collective efficacy” model suggests that neighbourhood disadvantage and delinquency are mediated by peer group norms as well as attitudes and actions. For example, higher socioeconomic status families were found to be more likely to socialize with families with similar attitudes and to convey their attitudes to their children (Delgado-Gaitan, 1992). Another example of this model explains how children in higher socioeconomic neighbourhoods were more likely to have collective efficacy and to have organized participation in activities, both of which were associated with better mental health in 5-11 year olds (Xue et al., 2005). Whereas much of the research used to understand the role of the family in understanding or influencing the academic outcomes of children and youth with E/BD aligns with the “norms and collective efficacy” model, the second model can also be used to understand the challenges that some children and youth with E/BD from lower socioeconomic status homes have in being successful in school.

There are some research findings related to the effects of neighbourhood which directly apply to children and youth with E/BD. Stouthamer-Loeber, Loeber, Wei, Farrington, and Wikström (2002) studied risk and resiliency factors that predicted serious delinquency in males. They analyzed child attitudes; school and leisure activities; peer behaviour; family functioning; and demographics. They found that other than disadvantaged neighbourhoods being associated with a higher prevalence of risk effects and a lower prevalence of protective effects, predictive relations between risk and protective effects were linear and similar across neighbourhoods and socioeconomic status. Thus, having limited protective factors in some neighbourhoods may influence the school and behavioural outcomes for students with E/BD. Also considered were the social interactions in lower socioeconomic neighbourhoods. In a review of studies of neighbourhood effects on depression and depressive symptoms, Mair, Roux, and Galea
(2008) reported that the most common association with E/BD was the socioeconomic composition of neighbourhoods through the effects of social processes such as neighbourhood disorder, social interactions, and violence. Children isolated from mainstream peer groups were more likely to form friends with peers exhibiting alternate values such as aggression (Dodge, Pettit, & Bates, 1994). As well, in areas with higher levels of violence, the community was found to disrupt parenting practices and increase peer associations with deviant peers (Simons, Johnson, Beaman, Conger, & Whitbeck, 1996). Increased community violence was also found to be related to lower achievement, lower grade point averages, as well as increased rates of depression, disruptive behaviour, and hyperactivity (Schwartz & Gorman, 2003). As some of the schools in lower socioeconomic areas were overcrowded, these environmental deficiencies may also have influenced the education for students attending these schools (Adelman & Taylor, 2005). As well, living in a disordered neighbourhood with delinquent friends was found to contribute to antisocial outcomes when there was inconsistent discipline and low emotional support from parents (Chung & Steinberg, 2006), suggesting that the influencing factor may have been the parents’ behaviours and the home environment. Wagner and Blackorby (1996) found that for students with special needs, attending schools with larger proportions of low-income students did not make a significant additional difference in postschool outcomes independent of the individual's household income, as living at the poverty level was associated with worse outcomes, however, it may have been that the influencing factor was the parenting practices and not the family income per se.

2.2.6 Living in Poverty

Living in poverty has been recognized as the single greatest predictor of academic and social failure (Rylance, 1997). This is significant for students in BC, as this province reported the highest rate of children living in low income homes in Canada, with an 18.8% before-tax child poverty rate (First Call, 2009). Of children living in poverty in BC, 50.3% lived in single parent families headed by females in comparison to 16.3% of children in the general population in BC who lived in single parent households (First Call, 2008). It is important to recognize that

...growing up in poor household increases the risk of exposure to adversities such as scarcity of food, poor nutrition, violence, inadequate education, and living in a neighbourhood characterized by absence of social networks, all of which are risk factors for mental disorder (Patel et al., 2007, p. 1304).

Poverty and family stressors related to poverty were also found to be pervasive among students with E/BD (Wagner (1995). The effects of children and youth living in poverty included having:
lower levels of academic self-efficacy and achievement, specifically in mathematics (Catsambis & Beveridge, 2001; Eamon, 2002; Guo, 1998; B. A. Taylor, Dearing, & McCartney, 2004; Sirin, 2005; K. R. White, 1982); poorer adaptive functioning (R. H. Bradley & Corwin, 2002); more problems in adolescence as reported by the teachers and parents of the children and youth (R. H. Bradley & Corwin), (but not by the children and youth themselves) (Conger et al., 1992); more disruptive classroom behaviours and peer rejection (C. J. Patterson, Kupersmidt, & Vaden, 1990); higher rates of learning disabilities (Brooks-Gunn & Duncan, 1997); higher school absenteeism (Audas & Willms, 2001; Catsambis & Beveridge, 2001); more placement in lower curriculum tracks as well as in special education programs (C. E. Cooper & Crosneo, 2007; Eamon, 2002); and higher rates of school dropout (Audas & Willms; Brooks-Gunn & Duncan).

Some research specifically described the impact of persistent poverty on children and youth. Persistent poverty was found to have more predictive impact on children’s mental health than current poverty with greater lengths of time in poverty predicting higher mental health problems (McLeod & Shanahan, 1993). Persistent poverty was also found to have a stronger negative impact on academic achievement than a one year measure of poverty (Korenman, Miller, & Sjaastad, 1995). Guo (1998) found that the number of years the family was poor during the four years preceding an assessment of math and reading in early adolescence had more negative impact on the youths’ achievement levels than did poverty early in life. As well, children who had experienced persistent family poverty were found to experience more problematic peer relations, more conduct problems, and lower self-esteem (Bolger, Patterson, Thompson, & Kupersmidt, 1995).

The relationship between mental health problems and lower socioeconomic status did not hold in all studies, as a study completed in an urban city in Texas that underrepresented families below the poverty level did not find that socioeconomic status was related to increased mental disorders, which suggested that low socioeconomic status may not have been as strongly associated with increased mental disorders as was family poverty (Roberts et al., 2007). The relationship between mental health status and poverty may also be culturally related as Costello, Farmer, Angold, Burns, and Erkanli (1997) found that poverty was positively associated with child psychiatric disorder and mental health service use in white children but not in American Indian children who used fewer mental health services (although the availability of services was not described nor was the cultural influence on use of services). It may also be that perception of poverty is an important aspect as Canino et al. (2004) found that neither parental education nor income were related to any of the disorders they assessed even when relative poverty was categorized, however, when a measure of family perception of poverty was used, there was a stronger association between poverty and externalizing disorders but less of an association for internalizing disorders.
When families lived in poverty, parenting a child with E/BD was described as being particularly challenging. These parents were found to be more stressed, frustrated, depressed, and powerless because of their lack of time and economic resources (R. H. Bradley et al., 1989). They sometimes experienced difficulty participating in school activities because of barriers such as nonflexible work schedules, a lack of resources, transportation problems, and stress from financial struggles (Hill & Taylor, 2004; Weiss, Harris, & Catron, 2003). They sometimes had less access to support systems (Horvat, Weiniger, & Lareau, 2003), and they may not have been able to provide home and community enriched experiences such as recreational and cultural activities for their children (R. H. Bradley et al., 2001; Brooks-Gunn, Klebanov, & Liaw, 1995). Although poor, some of these parents may have believed that education was a route to economic and social mobility (Delgado-Gaitan, 1992) however, they may not have been able to help their children with education because of their own lack of education, or because they, themselves, had been students with special needs. For these and other reasons, parents who lived in poverty may be less involved in their children’s education, depending on what is measured. In evidence, Moles (1993) reviewed large-scale surveys of parent involvement in their children’s education that was undertaken in the 1970s and 1980s and found that parents with very low incomes had one third the contact with schools as compared to parents with high incomes. When the U.S. Department of Education conducted a survey of parent involvement, it also found that parents below the poverty level had significantly lower levels of school contact than parents above the poverty level (Vaden-Kiernan, McManus, & Chapman, 2005).

Some interventions were suggested to increase parent involvement in elementary schools that served high poverty families. According to Redding, Langdon, Meyer, and Sheley (2004), parents in these schools needed to participate in decision making at the school, and schools needed to:

- align their policies and procedures regarding homework and parent-teacher conferences with rubrics of research-based practices;
- explicitly discuss the roles of parents, teachers, and students in things such as learning standards and homework policies;
- focus on parent education in areas such as home reading and study habits; and
- provide outreach through home visits, family nights, and a family resource library.

2.2.7 Parent Involvement in the Education of Children and Youth

Effective parents are involved in the education of their children (Purkey & Smith, 1983) and there is a well-documented relationship between parents’ involvement in their children’s education and their children’s academic success (Fan & Chen, 2001; Henderson & Mapp, 2002; Hong & Ho, 2005; Minke & Anderson, 2005; Spera, 2005; Volk, Craig, Boyce, & King, 2006). Greater parental involvement in the education of their children has been correlated with increased student positive attitudes toward school; improved homework habits; reduced absenteeism; reduced school dropout, and enhanced school achievement across grades (Astone & McLanahan, 1991; Desforges &
Abouchaar, 2003; Eccles & Harold, 1996; J. L. Epstein, 1987; Fehrmann et al., 1987; Lareau, 1987; S. Lee, 1994; Simon, 2004; Steinberg, Lamborn, Dornbusch, & Darling, 1992; D. L. Stevenson & Baker, 1987). This involvement has also been correlated with significantly higher rates of attendance in postsecondary education, independent of other demographic or school program differences (Wagner, 1995).

Some studies specifically supported the benefits of parental involvement in the education of their children when their children were in high school. A Canadian study by Volk et al. (2006) found that in all provinces but not the Yukon and Northwest Territories, when parents were involved in the education of their adolescents, and were reported by the adolescents to care for them, both their adolescents’ achievement and enjoyment of school were positively influenced. A meta-analysis of 52 studies undertaken by Jeynes (2007) to determine the influence of parental involvement on the educational outcomes of urban secondary school students as measured by their academic achievement, grades, results on standardized tests, teacher ratings, as well as on measures of academic attitudes and behaviours, concluded that although parental participation and attendance at school had mixed impact on overall academic achievement, it did have an impact on school grades that was significant for secondary students. A study by Catsambis (1998) reported that family involvement activities in Grade 12 had a positive influence on English and math grades; attendance; behaviour; and the number of courses completed successfully (Catsambis, 1998).

Despite literature indicating that parent involvement in the education of their children improved intellectual and social development, the supporting data was considered problematic as the research was predominantly correlational (Eccles & Harold, 1996; J. L. Epstein & Dauber, 1991; Mattingly, Prislin, McKenzie, Rodriguez, & Kayzar, 2002). In evidence, a meta-analysis to determine the relationship between parental involvement and urban secondary school student achievement noted that greater parental involvement in their children’s education, including involvement at school, was associated with higher student academic achievement, but the studies reviewed did not determine whether increasing parental involvement would increase student achievement levels or what kinds of parental involvement improved student achievement for what kinds of students, families, and environments (Jeynes, 2007). As well, much of the research that supported the role that parents played in their children’s school and education was not grounded in theory (A. J. L. Baker & Soden, 1998; Henderson & Mapp, 2002) or it was confounded by so many child, teacher, and parent variables (Eccles & Harold) that the results were difficult to interpret and were inconclusive (Domina, 2005).

Increased levels of involvement by parents in the education of their children were found to be related to a number of factors. In a survey of parents of children in Grades 1-6, Green, Walker, Hoover-Dempsey, and Sandler (2007) found that home based parent involvement was predicted by parents’ perceptions of specific invitations from their child, their own self-efficacy beliefs, as well as their perception of the time and energy they had to be involved. Parent involvement at school was found to occur or increase when it was suggested by their child or their child’s teacher that they become involved, when parents believed that the school wanted or expected them to be involved,
or when parents believed that their involvement would improve their children’s learning and academic success (Deslandes & Bertrand, 2005; Deslandes & Cloutier, 2002; Hoover-Dempsey & Sandler, 1997; Hoover-Dempsey, Walker et al., 2005; Sheldon, 2002; H. W. Stevenson, Chen, & Uttal, 1990). In a survey of parents of adolescents in Quebec secondary schools, Delandes and Bertrand reported that parents’ perceptions of students’ and schools’ invitations were the most powerful predictor of parental involvement at school or at home for students in Grades 7-9. The more parents believed their actions would improve the learning and academic performance of their children, the more likely they were to be involved at school (Hoover-Dempsey, Bassler, & Brissie, 1992), the stronger was their self-efficacy and the more persistent was their involvement (Hoover-Dempsey et al., 2001). When high schools initiated outreach activities to involve parents, parents were found to become more involved in parenting, volunteering, and learning activities with their youth (Simon, 2004). S. Lee (1994) noted that parents’ involvement was directly related to the extent to which they felt informed and believed they had the knowledge to have an effect on their children’s education and were able to contribute to their children’s learning.

Parent involvement in schools was found to be related to specific student characteristics. Youth who were more work oriented and self confident involved their parents more in their school activities (Deslandes & Cloutier, 2002), and those who were high achieving wanted more parent help than those who were low achieving (Zimmerman & Martinez-Pons, 1986). Parent involvement was also more strongly associated with daughters than with sons (Deslandes & Cloutier), particularly for adolescent daughters (Sui-Chu, & Willms, 1996). As parents typically contacted the school when their child first exhibited learning or behaviour problems (Deslandes & Bertrand, 2005), or when their child first started doing poorly in school (Delgado-Gaitan, 1992; H. W. Stevenson et al., 1990), more parent contact with the school did not correlate with good academic performance (S. Lee, 1994). In fact, the more problems a child had, the more likely parents were to be in contact with the school (Sui-Chu & Willms). Thus, in understanding the parents’ involvement at school, it would be important to recognize that children and youth “can actively shape, and work towards encouraging or discouraging, ensuring or preventing, their parents’ involvement in their education for their own reasons” (Edwards & Alldred, 2000, p. 442) and that higher parent involvement may not correlate with higher school achievement for their children.

Although parent involvement at school is helpful at all grade levels (Catsambis, 1998; S. Lee, 1994; Simon, 2001), parents’ involvement was found to be age and grade related in that it was found to decrease year by year as children got older and gained more autonomy (J. L. Epstein, 2001; Green, Walker, Hoover-Dempsey, & Sandler, 2007; S. Lee; Simon, 2004; D. L. Stevenson & Baker, 1987). Specifically, parents of high school students were more likely to be involved in supporting education at home through their relationships with their children than they were to be involved at school (Deslandes & Bertrand, 2005; J. L. Epstein, 2001). As well, earlier parent involvement at school was found to predict later involvement. For instance, higher levels of early parental involvement for Grade 1 students was found to be predictive of higher parental involvement in Grade 3; and, when children were higher achieving in Grade 1, their
parents were more likely to have higher educational expectations for them and to be more involved at their schools in Grade 3 (Enlund, Luckner, Whaley, & Egeland, 2004). Higher parental involvement for elementary school students was also associated with a decreased probability of high school dropout (Barnard, 2004).

Parent involvement was found to decline when children and youth were in high school. Although parent involvement at school declined when their children were in Grades 8-10, the underlying structure of parents’ involvement when their children were in Grade 8 predicted their involvement when their children were in Grade 10 (S. Lee, 1994). Parents remained interested in their youth’s homework in high school (S. Lee), although they did not necessarily know how to be involved (Simon, 2004). Some parents did not believe that they knew enough about the schoolwork in high school to be able to help their children, and in high school, their children were more independent with their homework (H. Cooper et al., 2000). For high school students with disabilities, when parents were more supportive by monitoring their children’s progress and by helping their children with homework, their children missed approximately 5 fewer days of school per year, were 25% less likely to fail a class, and were significantly more likely to go on to postsecondary education than were their peers with disabilities who had less involved parents, independent of socioeconomic and other differences (Wagner, 1995). Some parent actions, namely educational expectations, consistent encouragement, and actions that promoted education, were found to be positively associated with high school students course credits in mathematics, science, and English (Catsambis, 2001).

The involvement of mothers is specifically discussed in the literature. The nature of mothers’ involvement in their children’s education was found to be different from that of fathers. Whereas mothers were found to help their children regardless of their children’s achievement levels, fathers’ interest was found to be correlated to their children’s educational outcomes in that fathers were less interested in the grades of children who had failed, and they had lower expectations for these children (Flouri & Buchanan, 2001; Gregory & Weinstein, 2004). Mothers were also found to have more involvement at school than fathers (D. P. Baker & Stevenson, 1986), particularly for adolescent sons (Deslandes & Potvin, 1999). More educated mothers were found to be more supportive of education; to be more involved in school activities; to be more knowledgeable about their child’s school performance; to have more interactions with teachers; and to take more action on behalf of their children related to achievement when necessary (A. D. Benner et al., 2008; D. L. Stevenson & Baker, 1987). Although monitoring of academics by less educated mothers was correlated with reduced student engagement in learning, this was not so much the case when mothers were more educated (A. D. Benner et al.). As well, for younger children in Kindergarten to Grade 5, higher involvement in the education of their children by less educated mothers was found to reduce the achievement gap noted between the lower achievement of children with less educated mothers and the higher achievement of children with better educated mothers (Dearing et al., 2006).
2.2.8 Roles Parents Take in the Education of Children and Youth

Parents were found to understand their role in their children’s education in various ways. Some parents took on responsibility for the day-to-day management of their children’s education, whereas other parents left the education of their children entirely in the school’s domain (Sheldon, 2002). Still other parents of students with E/BD saw themselves as protectors of their children, as advocates, or as encouragers (Grolnick & Slowiaczek, 1994).

Some parent roles were associated with specific outcomes in their children. The expectations of parents for their children’s achievement, goals, and values concerning education, the importance they placed on education and their promotion of educational activities were each found to positively relate to their children’s academic performance (Fehrmann et al., 1987; Kurdek & Sinclair, 1988; Kutash, Duchnowski, Sumi, Rudo, & Harris, 2002; Milne, Myers, Rosenthal, & Ginsburg, 1986; D. L. Stevenson & Baker, 1987). For instance, parents’ values were found to directly and indirectly predict the occupational aspirations of Grade 7 students (Jodl, Michael, Malanchuk, Eccles, & Sameroff, 2001). Parents often showed their children the value they placed on education through being involved at school and interacting with educators, which, in turn, was found to have a direct positive effect on their children’s achievement (D. L. Stevenson & Baker). In a meta-analysis of studies from the National Educational Longitudinal Study, Fan and Chen (2001) noted that although parents’ home supervision had a weak relationship with children’s academic achievement, parents’ expectations for this achievement were positively related to better achievement. Fan and Chen also found that larger parental social networks predicted more parental involvement in education at home and at school after controlling for background factors, parental beliefs, and parent perception of other parents’ expectations for their involvement.

Parents’ perceptions of their children’s abilities were found to influence their children’s own concept of their abilities as well as their children’s actual achievement (Alexander, Entwisle, & Horsey, 1997; Fan & Chen, 2001; Ma & Klinger, 2000). When parents believed in their children’s potential and were involved with their children’s learning, both the children’s social functioning and relationships with peers were better (Pomerantz, Moorman, & Litwack, 2007). Parents’ beliefs in their children’s abilities were found to be influenced by the school’s and community’s messages about their children to the parents (Halle, Kurz-Costes, & Mahoney, 1997). For example, a study by Parsons, Adler, and Kaczala (1982) found that parents’ beliefs in their children’s math achievement in Grades 5-11 were more directly related to children’s self-concepts and expectancies than were children’s previous performances in math, which, in turn, were more influenced by parents’ attitudes about their children’s abilities than by their children’s actual abilities in math. Halle, Kurz-Costes, and Mahoney noted that in low-income African-American children, there were strong associations between parents’ perceptions of children’s math and reading skills and their children’s perceptions of their own skills, but there was also a strong link between parents’ perceptions and their children’s achievement outcomes. Thus, parent’s perceptions of their children’s abilities and parents’ actions appeared to influence their children’s actual achievement, which, in
turn were influenced by their children’s perceptions of their own abilities as well as the perceptions of the children by the school and the community.

### 2.2.8.1 Parents Involvement at Home

Much of parents’ involvement in their children’s education occurs outside of school. What parents did with their children and said to them was described as influencing their children’s educational outcomes (Croll, 2004) and, for many parents, their involvement on behalf of their children at home in the education of their children was greater than their involvement at school (Green et al., 2007). Parents were described as being their children’s first teachers, and as often teaching their children throughout their children’s lives, thus contributing positively to their children’s education and development (Sheldon, 2002). Parents’ activities and discussions with their children were surveyed by Simon (2004) who found that 65% of parents worked on homework with their youth at least sometimes, and 21% worked on homework with them frequently; 58% talked often with their children about course selection, 62% about school activities, 53% about what was studied in class and 77% about grades. In a national longitudinal study of high school students, over two thirds of parents reported discussing postsecondary education plans with their children regularly and about half of parents reported talking to their children about jobs after high school frequently (Simon).

The effect of parent supervision, mentoring, and monitoring of homework was discussed in the literature with mixed effects found for different actions. Eccles and Harold (1996) found that help with homework was provided more by parents with fewer children. According to S. Lee (1994), the more active parents were in monitoring and planning educational experiences for their children, the more their children gained from these experiences. Deslandes et al. (1997) reported that parents who provided greater homework supervision had children who achieved better in school. Croll (2004) found that parents who monitored homework completion and mentored their children at home had children who achieved better educational outcomes and they also had increased parent-child communication and wider family social networks. Homework help was specifically found to be correlated with children achieving significantly higher scores on tests of reading and on measures of intelligence (J. Stevenson & Fredman, 1990). A study by Ho Sui-Chu and Willms (1996) analyzed middle school achievement using data from the U.S. based National Education Longitudinal Study that sampled Grade 8 students in 1988 and followed them through high school. They found that when parents discussed school with their children and helped them plan their education programs, their children’s school achievement was better. Parent discussions with their children benefitted the children by: improving their interaction skills, teaching them verbal cues, teaching them to take directions, giving them guidance, and by encouraging them (Chao & Willms, 2002; Christenson, Rounds, & Gorney, 1992). When parents helped their children through mathematics-focused learning activities at home that included interactive math homework assignments and use of math materials and resources, their children’s mathematics scores improved when prior knowledge was held constant (Sheldon & Epstein, 2005). Recommended parental involvement at home included
providing a positive home environment conducive to learning, setting aside a time for homework, modelling learning, encouraging reading, and limiting television viewing (Christenson et al., 1992).

Conversely, Fan and Chen (2001) reported that parental home supervision had a weak relationship to academic achievement and Milne et al. (1986) found that parents who helped their children with homework had a negative influence on their children’s school success but this could have been because parents helped children who were struggling in school. A. D. Benner, Graham, and Mistry (2008) also found that monitoring of homework completion was negatively related to adolescents’ reported school engagement. A meta-analysis of parents’ involvement in their children’s homework by Patall, Cooper, and Robinson (2008) reported that the overall effect of parents helping their children with homework was small and often not significant except with younger students, although setting rules about when and where homework should be done had a positive relationship with achievement for students in Kindergarten to Grade 5 as it decreased problems with homework and increased homework completion rates. Patall et al. also encouraged parents’ involvement when parents had particular and relevant expertise in the area they were providing assistance.

2.2.8.2 Parent Involvement at School

When parents become involved at school, they help their children, their children’s school(s), and themselves. This participation was supported by Bronfenbrenner (1974; 1979) who argued that parental involvement at school was critical to providing good education for children and that schools needed to develop a strong partnership with families to support the healthy development of children. For students with E/BD, the extent to which their parents participated in the life of the school and community in activities such as volunteering, attending sports events, plays, and concerts was critical to their children’s school success (Wagner, 1995). When parents volunteered at school or attended parent conferences and meetings, they were in ongoing contact with the school, they gained insight on how schools worked, and they could communicate more easily with the school about their child as well as be a better advocate for their child (L. H. Brown & Beckett, 2007; P. Cooper, 2006; Hill & Taylor, 2004). Involved parents could also see their own child in the school context in comparison to other children, and they could learn a consistent set of rules about appropriate behaviour or strategies that they could implement at home (Hill & Taylor, 2004; Jivanjee, Friesen, Kruzich, Robinson, & Pullmann, 2002). By parents being involved at school, the school and home could become more congruent, which could result in the child having to make fewer adjustments when transitioning between the two contexts (J. L. Epstein, 1987). More involved parents also had the opportunity to develop more positive feelings towards education and the school system as well as work collaboratively with the school to commit to any needed changes, problem solving actions, and agreed upon goals (Rzepnicki, 1987). As experts on their child, parents helped schools define the nature of their child’s problems, the factors that had contributed to the problems and possible intervention strategies that could be effective (D. Osher & Quinn, 2003).
When parents gave input to teachers, teachers were able to provide more appropriate and relevant services for the child (Rzepnicki, 1987). Research by Grolnick and Slowiaczek (1994) found that teachers paid more attention to children when they believed that parents were more concerned and involved. According to Jivanjee et al., 2002, this involvement changed the way they approached delivery of services and their view of their work. As a result of communication with parents, teachers tended to increase their expectations of the child as well as their appreciation of all parents, which, in turn, promoted more family involvement at home (Delgado-Gaitan, 1991; J. L. Epstein & Dauber, 1991; J. L. Epstein & Van Voorhis, 2001; S. Lee, 1994). For students with E/BD, Aeby, Manning, Thyer, and Carpenter-Aeby (1999) noted that intensive family involvement resulted in better student behaviour, higher grade point averages, better attendance, and lowered dropout rates in comparison to students with E/BD whose programs did not include this parental involvement.

Conversely, some studies reported a negative or nonsignificant effect of certain kinds of parental involvement at school. Domina (2005) used data from the U.S. based 1979 National Longitudinal Survey of Youth to assess the effect of parental involvement on children’s elementary school achievement tests. They reported that after controlling for school and family background, as well as the child’s prior academic achievement, the effect of parent’s attendance at parent-teacher conferences, membership in Parent Teacher Associations (PTAs), volunteering at school, homework checking, and homework help were negative or nonsignificant. Indeed, Deslandes et al. (1997) reported that parents who attended conferences at school and had more contact with schools had children who attained lower school grades. An explanation for the negative relationship between numbers of school contacts, level of attendance, and good behaviour was provided by Simon (2004) who postulated that schools contacted parents more when students’ behaviour or attendance was problematic, but that the schools may not have described ways that parents could help their children with specific kinds of support, and the parents may not have known how to further resolve the issues brought to their attention, thus making the contact ineffective.

Some parents may not have seen their role as including involvement at school or they were unable to be involved at school for other reasons including:

- inflexible work schedules;
- a lack of comfort with the school because of their prior personal experiences with schools or professionals including prior conflict with them;
- socioeconomic status differences that made parents feel uncomfortable at school;
- territorialism and attitudes from the school that pushed parents away and did not promote involvement;
- language difficulties that hampered communication with the school;
- community characteristics that did not encourage parent involvement at school; and
- a lack of knowledge or training on how parents and educators could work together (Hoover-Dempsey & Sandler, 1997; Hoover-Dempsey & Walker,
Sometimes parents of children and youth with E/BD felt that they were discouraged from being involved at school, either because of perception or actual stigmatization against individuals with mental disorders. They may also have avoided involvement at school because of their perception that their child was a burden on the school system or the school may have let them feel that they were being blamed for their child’s behaviour (J. Lane, 2005). Sometimes they chose not to be involved at school because of their poor perception of the school. In evidence, research from a national study by Wagner et al. (2005) found that 22.3% of parents of students with E/BD in elementary school and 28.8% of parents of students with E/BD in secondary school were somewhat or very dissatisfied with their children’s schools. Of the parents surveyed, 14.8% of those with children in elementary or middle school and 18.5% of those with children in secondary school were somewhat or very dissatisfied with their children’s teachers; and, 19.6% of parents of elementary or middle school students and 21.8% of parents of secondary students were somewhat or very dissatisfied with their child’s special education services.

### 2.2.8.3 Parent Involvement in the Community

Parents who were more involved at school also became more empowered in the community outside of the school (Hoover-Dempsey & Sandler, 1997; Hoover-Dempsey, et al., 2005). This influence of parents on the education of their children occurred through parents’ culture, language, values, spirituality, and social contacts within their communities (T. W. Osher & Osher, 2002). Some parents not only saw their roles as advocates for their own children but also as advocates for all children with special needs. They became involved in councils, businesses, and other organizations where they could have a collective voice to influence (T. W. Osher, deFur, Nava, Spencer, & Toth-Dennis, 1999). These parents were able to collaborate with professionals in order to advise, plan, provide, and enhance services that improved school systems and government (D. Osher & Quinn, 2003; Wolf, 1982). T. W. Osher et al. (1999) described this role as families finding their collective voice to become assertive leaders who ensured that children and youth received the services and supports they needed to learn and to grow up emotionally strong, safe, competent, and healthy.

### 2.2.9 Community Involvement

Various federal and provincial government ministries and community agencies work together with families to support children and youth with E/BD. In BC, the value of collaborating and coordinating to support children and youth is recognized by both the provincial government’s social services and education ministries. The BC Ministry of Children and Family Development document Strong and Supported (n.d.) states that collaboration and coordination are key to promoting healthy development. Collaborative planning to support students with behavioural disorders is also described in the BC Ministry of Education Special Education Services: A Manual of...
Policies, Procedures and Guidelines (2008). The services that support children and youth with E/BD in BC have typically included “public health, primary care, acute care, special education, child protection and youth justice” (Wadell, McEwan, Shepherd, Offord, & Hua, 2005, p. 231). These services have coordinated to provide better assistance to families receiving support from multiple providers for students with complex, multiple needs, giving accessibility to appropriate, comprehensive, continuous, flexible, and needed services in a timely manner (Kochhar-Bryant, 2005). When ministries and agencies work together, they provide families with respectful, trusting, consistent involvement as well as shared information, responsibility, and accountability as they create common goals (Rutman, Hubberstey, Hume, & Tate, 1998).

Often the term “collaboration” is used specifically to describe the highest level of working together by two or more organizations through a formal or informal arrangement (Daka-Mulwanda, Thornburg, Filbert, & Klein, 1995). In collaborative relationships, the partners jointly develop and agree to a set of common goals and directions and share responsibility for attaining those goals using the expertise of each collaborator (Daka-Mulwanda et al.). These collaborative relationships work effectively when they:

- have a clarity of purpose and objectives;
- deal with power differences;
- have leadership that does not allow anyone to take over;
- have time to build up understanding;
- share workload fairly;
- resolve different levels of commitment;
- have equal ownership; and
- accept that partnerships evolve over time (Vangen and Huxham, 2003).

Collaborating to improve services for children and youth with E/BD can improve both the organizations that work together and the support they provide for children and youth with E/BD. According to Kochhar-Bryant (2005), benefits can include:

- improved system coordination and access
- reduced policy complexity and fragmentation
- closure of service delivery gaps
- reduction of organizational barriers
- alignment with educational reform initiatives
- development of personnel
- responsiveness to demographic changes
- strengthening of local capacity building through technical assistance
- provision of funding and reallocation of resources (p. 334).

Other benefits can include:

- more empowerment for all (Worthington, Hernandez, Friedman, & Uzzel, 2001);
- more program and cost effectiveness (Jones, 2002; Trutko & others, 1991);
- more coordination of treatment and services without unnecessary duplication of services (Druss, Rohrbaugh, Levinson, & Rosenheck, 2001; Koren et al., 1997);
- provision of services that progress from modality to modality;
- a wider conception of the kinds of services available (Tarico et al., 1989);
a greater understanding of the overall needs of the child (Jones);
• a greater perspective and knowledge about the child in different contexts or ecologies;
• better knowledge about the informal assistance and social supports available (Tarico et al.); and
• more opportunity to reinforce appropriate behaviours across contexts as there is more data available and shared feedback from each context (Jones).

The roles that parents, professionals, and community members have on collaborative teams were described in the literature. Parents typically have an affective relationship with their child as well as bonds and responsibilities that other team members don’t have. As such, they bring specific perspectives to the teams. The parents’ roles include participating in the planning, implementation, and evaluation of all services provided to their children (Friesen & Koroloff, 1990; T. W. Osher & Hunt, 2002). They bring their expertise about their child to the teams (Friesen & Koroloff) including their knowledge about their child’s developmental history in medical, social, and educational contexts as well as how their child’s problems have progressed (Tarico et al.; Wolf, 1982). They are also knowledgeable about their child’s aspirations and are typically committed to their child for the long term (Todd & Higgins, 1998). Parents provide teams with an understanding of the impact of their child’s problems on the family (Koren et al.; Tarico et al.), as well as an understanding of their own needs and desires as related to their child (Jones). They provide consistent monitoring of their child and can respond when their child is “at risk” or is in high risk settings (Dishon & McMahon, 1998). When the team is developing implementation plans, the teams can benefit from drawing on the wide range of social, activity, and material reinforcers the parents have available to them (Jones). Their monitoring of treatment effectiveness can be used to improve programs (Heward, 2003). From their knowledge base and information from their informal network of other parents, they can help with placement and programming (Wolf). The roles that professional and community members bring to the team can draw on their training, professional experience, agenda, level of commitment, and working style (Jolivette Barton-Arwood & Scott, 2000). Individuals who informally support the family, such as relatives, friends, and faith community members can bring a sense of security to the team (Dosser, 2001; Gregory & Weinstein, 2004). Individuals who provide informal support to the family can translate content and process at meetings; they can empower the parent and child or youth; and they can be the mouthpiece of the parent to help meet the parents’ needs (Munson, Hussey, Stormann, & King, 2009).

2.2.10 System of Care

The system of care approach is a child-centred method of service delivery that was developed to support children and youth who were severely emotionally disturbed to help them with their overall functioning, school attendance, and school performance (Stroul, 1993). It was developed as an approach to collaborate with families in their communities to provide comprehensive, integrated services through multiple agencies and professionals in order for children and youth who were severely emotionally disturbed to have the best possible chance for success in their communities.
disturbed to have their multiple and intersecting needs addressed (Eber & Nelson, 1997; Kochhar-Bryant, 2005). The “systems of care” philosophy, introduced in the 1980s, emanated from the philosophy of ecological mental health management and was developed to combat the existing fragmented, largely institutionalized method of service delivery for children and youth with severe emotional disturbance (Burns, Schoenwald, Burchard, Faw, & Santos, 2000) by conjoining service systems, which included child welfare, mental health, special education, and juvenile justice (M. H. Epstein et al., 2003) to collaboratively support children and youth with severe emotional disturbance. It supports the precept that a child has the capacity to grow, adapt, regenerate, and reorganize behaviours and to do this differently in various natural settings and within multiple and varied contexts while navigating through developmental stages (Anderson & Mohr, 2003). The guiding principles for system of care interventions were articulated by Stroul and Friedman in a Special Report: Caring for Severely Emotionally Disturbed Children and Youth (1988a). The report specifically referred to the following areas of education to be considered in intervention planning: assessment and planning, resource rooms, special education, special schools, home-bound instruction, residential schools, and alternate programs. This conjoined service system approach recognized that although interventions for younger children may be simple, as children age, the interventions may need to be longer, more intense and different, and be adaptable to developmental changes (Anderson, Sprague Effland, Kooreman, & Wright, 2006).

System of care interventions were found to result in students attaining higher grade point averages, increased attendance, and lower dropout rates (Aeby et al., 1999; Rosenblatt & Attkisson, 1997). In two of three programs with system of care interventions described by Rosenblatt and Attkisson, students achieved grade level increases of one year or more for all subscales as measured by achievement tests administered, which was described as good progress as these students had previously lagged behind. The students also maintained high levels of attendance, which was achieved by both indirect means (e.g., enhancing positive feelings towards school), and direct means (physically bringing the students from home to school). In a study of the impact of system of care team structure on the achievement of treatment goals, E. K. Wright, Russell, Anderson, Kooreman, and D. E. Wright (2006) analyzed team size, form, and role composition. They reported that teams that consisted of four to eight members and included the youth as well as multiple family members were more effective, whereas teams with nine or more roles had a very low probability of success. Students referred from mental health were more likely to meet treatment goals than students referred by the juvenile justice system. Overall, when the justice system was not involved, the youth were 3 times more likely to have successful program completion. Youth with higher ratings of problem behaviours were also less likely to meet treatment goals.

2.2.11 Wraparound

Wraparound is a system of care model developed to plan and coordinate services for children and youth with behavioural health needs and their families. Coined
“wraparound” as it provides a “no reject, no eject” unconditional caring system of support (Burns et al., 2000, p. 296), it was developed to foster lasting changes in individuals, families, and communities through effective programs for severely emotionally disturbed children and youth (Burns et al.). As such, it is a planning process

...used to build consensus within a team of professionals, family members and natural support providers to improve the effectiveness, efficiency, and relevance of supports and services developed for children and their families. This interagency process emphasizes strength-based interventions that blend the perspectives of all involved persons to ensure success across life domains and settings. (Eber, Sugai, Smith, & Scott, 2002, p. 3)

Wraparound is both a system of care service tailored to meet the individual’s needs and a philosophy of care. Through individualized service and natural supports it is to achieve the positive outcomes that the team involved in the wraparound determines are needed (Ferguson, 2007). It assumes that an individual functions best when the “supportive relationships among the family, school, and community facilitate the attainment of improved behavioural functioning for a given child across a comprehensive set of life domains” (Burns et al., p. 296). Wraparound embodies the following two principles: “engaging the family as decision making participants and enhancing strengths to meet needs across the full ecology of the family in the community” (Malysiak, 1997, p. 401).

   The wraparound process is framed by eight elements which serve as its philosophical base (VanDenBerg & Grealish, 1996). These elements are:
   
   (a) Wraparound efforts must be based in the community.
   (b) Services and supports must be individualized to meet the needs of the children and families and are not designed to reflect the priorities of the service systems.
   (c) The process must be culturally competent and build on the unique values, strengths, and social and racial make-up of children and families.
   (d) Parents must be included in every level of development of the process.
   (e) Agencies must have access to flexible, non-categorized funding.
   (f) The process must be implemented on an inter-agency basis and be owned by the larger community.
   (g) Services must be unconditional. If the needs of the child and family change, the child and family are not to be rejected from services. Instead, the services must be changed.
   (h) Outcomes must be measured. If they are not, the wraparound process is merely an interesting fad (p. 9).

The wraparound team typically consists of 4-10 members (VanDenBerg & Grealish), composed of family members, public and private community resource persons, as well as other informal support people (Anderson & Mohr, 2003; M. H. Epstein et al., 2003). In fact, all key players are to be at the table to reduce duplication of service and to increase coordination, cooperation, communication, and understanding between
schools, participating agencies and families (Anderson-Butcher & Ashton, 2004). The family members are to be full and active partners on the wraparound teams (Burns et al., 2000) and the family’s roles are to be interdependent and interchangeable with caregivers’ roles (Anderson-Butcher & Ashton). Families are to decide the level of collaboration or involvement of professionals, and this decision is to be discussed openly and without judgment of the family because of their choice (Malysiak, 1998). Families are to be given enough information and access to other care providers so that they can make responsible decisions critically and knowledgeably about perspectives and possible actions of the professionals (Malysiak). When needed, additional training can be given to parents, and they can receive appropriate training to enable them to implement a wider range of interventions for their child (Hanjian, 2000).

Wraparound teams are to consider positive history factors, strengths, protective factors, reciprocal relationships, and the effects of community on the child from a broad-based ecological perspective (Anderson & Mohr, 2003; M. H. Epstein et al., 2003). They are to discuss a wide range of issues including: poverty; job and/or family instability; parental stress; social isolation; community violence; issues related to rural versus urban settings; gang related issues (Anderson & Mohr); family cultural factors; ethnic factors; and family values (M. H. Epstein et al., 2003; Burns et al., 2000). The teams are to acknowledge differing values and maintain no single view of factors or issues. Differences are to be resolved by teams in ways that facilitate the best program for the child or youth (Malysiak, 1998).

The teams are to develop treatment plans that incorporate a strengths based perspective, utilizing strengths from the whole team (E. M. Z. Farmer & T. W. Farmer, 2000; Malysiak, 1997). The family is not told what services and supports the professionals will provide but they are asked to indicate their strengths and prioritise their needs (Eber et al., 2002). Together, the teams are to reach consensus on individualized desired outcomes such as improvements in academics and behaviour, attainment of greater family participation, and enhanced school-home transitions (Eber et al., 2002). Teams are to start by drafting crisis plans that would be implemented if a crisis should arise (Burns et al., 2000). Following this, the team is to develop formal and informal service plans that are flexible, varied (M. H. Epstein et al., 2003; Anderson & Mohr, 2003), need driven (M. H. Epstein et al., 2003), and adapt to developmental changes in the child or youth (Anderson & Mohr). Treatment plans can include the provision of respite care; after school, community and/or school related activities; individual therapy; parenting skills training; and mentors (Burns et al.). Treatment is to be provided without regard to race, religion, national origin, sex, or physical disability; and with sensitivity and responsiveness to any other special needs the child has (Stroul & Friedman, 1988b). Treatment is to be provided in a coherent, coordinated way in the child’s natural environment (Douglas, 2001); in the community (M. H. Epstein et al.), in natural settings (Anderson & Mohr); with naturally occurring supports (E. M. Z. Farmer & T. W. Farmer) as well as in least restrictive environments (Anderson-Butcher & Ashton, 2004; Burns et al.). Interventions that require the child to leave the community to receive services in institutions elsewhere are discouraged (Douglas, 2001). Within treatment plans, the assets and challenges of specific environments are to be discussed. For
example, in the school setting, the plan would consider the child’s peers, the availability of support persons, the staff’s expertise, and the identification of possible site specific crises (Anderson & Mohr, 2003). The treatment plans are to provide continuity, particularly between services for children and those in the adult service system (Stroul & Friedman, 1988b). Every level of service is to be assessed and measured by all participants on the planning team who established the outcomes and goals (Burns et al., 2000).

In schools, the collaborative relationship between the school, participating agencies, and the families served by the wraparound approach are to encourage a sense of cooperation, communication, and understanding (Anderson-Butcher & Ashton, 2004). In this way, the school does not have to work in isolation with the child which, according to Anderson-Butcher and Ashton, is important, as it hasn’t enough time or specific training to manage all student behaviours. Instead, school personnel are to contact appropriate experts and be part of a larger ecosystem of care for the child (B. Collins & T. Collins, 1994). The school personnel are to tell the team about the child’s competencies, resiliencies, and other characteristics within the school context (Anderson & Mohr, 2003) that will help the wraparound team provide appropriate resources, services, and prosocial opportunities (Anderson-Butcher & Ashton). Parents are anticipated to appreciate school efforts more when they see that the school is more supportive and supported (Anderson-Butcher & Ashton). Collaboration with the school is to enhance the parents’ knowledge, self-confidence and repertoire of adaptive coping skills (Anderson & Mohr; Anderson-Butcher & Ashton) as well as to enable the school to become more knowledgeable about the skills the parent already has.

### 2.2.12 Integrated Case Management

Integrated Case Management (ICM) is a collaborative case management approach that “puts clients at the centre” “supporting clients to identify and achieve their own goals, and direct their own lives to the greatest extent possible” (British Columbia Ministry for Children and Families, 1999, p. 2). ICM was developed in 1996, in BC, by a group of five different ministries (including Education) that decided to “bring about a more coordinated approach to its child welfare and child protection services in order to better meet the service needs of children, youth, families and other adults” (Hubberstey, 2001, p. 83). At that time, ICM was thought of synonymously with collaborative practice (Hubberstey, p. 84) and it was described as having: non-hierarchical relationships between participants; shared power; shared and inter-dependent leadership; a clear definition and understanding by team members of participants’ roles/responsibilities; and, decision making that respected the client/family judgment and autonomous choice (MCFD, pp. 2-14). The ICM process is to give voice and participation to all clients, including children and youth (Hubberstey). ICM utilizes service integration which “involves establishing and maintaining common structures and procedures between service providers for the purpose of coordinating their efforts to address a range of services/needs in an efficient, comprehensive and client-centered manner” (InfoWest Research, 2006, p.4). ICM is practiced variously in BC to support individuals and
families, particularly those with Ministry of Children and Family Development involvement.

In 2005, J. Lane conducted interviews with four mothers in BC in order to discover how they understood their role on the ICM teams that supported their children in Grades 7-11 who were identified by the school system as “Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness”. In the school district in which this research took place, the parent’s role on ICM teams was to work as a team member to support his/her child. Role duties included:

- helping to plan the ICM meetings (including helping determine participants to be invited);
- having a voice in the team’s plans, interventions and service choices; and
- keeping copies of documentation from the meeting.

The four parents interviewed each described being a part of numerous different teams to support their child over time. These meetings were organized and held by schools, hospitals, and community agencies, with different teams supporting the youth concurrently in different contexts. Whereas individuals from schools were described to have been supportive to the parents and their children, concerns were expressed by the parents about the lack of agreement by the different teams that had consulted about their child (often concurrently during the same school year), the pressure being put on them by schools for changes in their child’s behaviour, and the differing advice offered by the different staff members at school including that by administrators, counsellors, support teachers, and classroom teachers who sometimes contacted them separately to advise them. The parents described their need to be supported by the teams for both their objective burden (e.g., after school caregiving) and subjective burden (e.g., listening to their pain and concerns). They wanted to provide the teams with their child’s developmental background; their child’s functioning in different contexts; descriptions of their child’s character, goals, abilities, and attributes; their present concerns about their child; and their concerns about their child in the future. According to the parents interviewed, the school based integrated case management teams that had supported their children to maintain them in school had dealt predominantly with behavioural issues, thus often duplicating the role held concurrently by hospitals, Child and Youth Mental Health, community agencies, and private counsellors. Little mentioned was the role that schools maintained in the support of academic learning.

In a further project by J. Lane (2008), 20 youth supported by collaborative teams for their E/BD were interviewed to obtain their input on the ICM meetings held for them, both inclusive and exclusive of the school system. In these interviews, the youth described their need to receive support for both their behaviour and learning. Their recommendations for topics to be addressed by the teams that supported them included both academic learning and staying in school. Topics they wanted addressed included:

- their need to tell the teams how they were doing in school including their concerns and problems;
- the services and support they needed to be successful in school; and
- their need to have a plan in place at school for their future.
The youth did not separate their need for academic support and their need to have future post school plans from their need to have support for their behaviours, thus the youth themselves addressed behaviour and learning as entwined.

2.3 The Learning of Students with E/BD

2.3.1 Introduction

This section presents the nature of the relationship between E/BD, learning, and school success. It provides background on the cognitive, language, and achievement profiles of students with E/BD as well as interventions recommended to increase their school success. Following this, it examines the lack of success students with E/BD have in grade-to-grade transitioning and graduating from high school as well as ways to understand their lack of success. This section also describes the school system’s response to educating students with E/BD and the students’ trajectories towards either educational success or a lack of successful school completion.

2.3.2 The Relationships among E/BD, Learning, and Academic Achievement

That there is a relationship between students’ emotional and behavioural disorders and their difficulties in learning and achieving academic success in school is clearly established in the literature (Anderson, Kutash, & Duchnowski, 2001; Becker & Luthar, 2002; Dunlap, White, Vera, Wilson, & Panacek, 1996; Fessler, M. S. Rosenberg, & L. A. Rosenberg, 1991; Greenbaum, et al., 1996; Hinshaw, 1992; Kauffman, Cullinan, & Epstein, 1987; Kern, Delaney, Clarke, Dunlap, & Childs, 2001; McEvoy & Welker, 2000; Nelson, Benner, Lane, & Smith, 2004; Rock, Fessler, & Church, 1997; Strein, Hoagwood, & Cohn, 2003; Trout, Nordness et al., 2003; Wehby, Lane, & Falk, 2003). This relationship exists for students with internalizing as well as externalizing behaviours (Prior, Smart, Sanson, & Oberklaid, 1992), however, the nature of this relationship is not straightforward (Hinshaw, 1992; Kauffman & Landrum, 2009; K. L. Lane, 1999), but is instead quite complex (E. M. Z. Farmer & T. W. Farmer, 2000; Farrell, Critchley, & Mills, 1999). It is also confounded by the various terms used to describe behaviour such as “behaviours”, “externalizing behaviour”, “behaviour problems”, “delinquency”, “disorders” as well as the terms and measures used to describe and define learning, academic success, and achievement.

The nature of the relationships among E/BD, learning, and academic achievement have been described variously in the literature. Kauffman and Landrum (2009) stated that, “in most cases, it is not clear whether disordered behaviour causes underachievement or vice versa” and “in the majority of instances, the precise nature of the relationship is elusive” (p.202). Adelman and Taylor (2005) described behaviour and learning as being both reciprocally related and commonly or separately caused. When

...students have trouble learning at school, they frequently manifest behaviour problems. This is a common reaction to learning problems.
And, of course, behaviour problems can get in the way of learning. Furthermore, both sets of problems may occur simultaneously and stem from the same or separate causes. It is important to remember that an individual can have more than one problem” (I-14).

Filter and Horner (2009) stated that when there is a mismatch between a student’s level of skill and academic expectations, undesired behaviours are generated either when tasks are too easy or too difficult. However, when academic success occurs, a concomitant improvement in behaviour can occur (Sugai, Lewis-Palmer, & Hagan-Burke, 1999/2000). The social-emotional and academic development of students with E/BD has been described as entwined, as “dynamic and interrelated areas that are necessary for children to develop and be successful in many contexts, specifically school” (Klein, 2002), and that untangling social-emotional needs from learning needs and determining how both affect academic success may not be practically possible (Hinshaw, 1992; Kauffman & Landrum; K. L. Lane, 1999). Others have described behaviour and learning/achievement as having directionality. Miles and Stipek (2006) stated that when students fail academically, they become frustrated, and, as a result, they exhibit more aggression, which increases as they progress through school and as they encounter more failure and frustration. Sutherland, Lewis-Palmer, Stichter, and Morgan (2008) added that as students’ age, those with academic weaknesses become more aware of their deficits, which may further trigger their negative emotions.

The relationship between externalizing E/BD and a lack of school success is described by Hinshaw (1992) in four possible models. They are: a) underachievement leading to externalizing behaviour; b) externalizing behaviour leading to underachievement; c) both domains leading to the other; and, d) underlying variables such as temperament, language difficulties, discordant homes, and large family size resulting in both externalizing behaviour and underachievement. Although the relationship between aggression and intellectual incompetence/achievement failure is theorized as being bidirectional, Hinshaw argued against aggression preceding school dysfunction for a number of reasons. He stated that: a) family climate and a deficient learning environment correlate with intelligence-discrepant achievement, b) attentional issues affected intelligence scores negatively, c) the correlation with verbal intelligence, which was influenced by learning environment, was more predictive of adolescent conduct problems than performance intelligence and, d) verbal mediation deficiencies (social cognitive information processing deficits) of youth with behaviour difficulties were related to deficient self-regulation, peer adjustment problems, and a pattern of hyperactivity plus aggressive behaviour. By reviewing links between academic underachievement and difficulties in behavioural adjustment, Hinshaw found that lowered intelligence and lowered achievement were more frequently correlated with externalizing behaviour, leaving the possibility that both underachievement and externalizing behaviour were caused by lower intellectual capacity.

Some studies examined the directionality between behaviour and academic achievement. Chen, Rubin, and Li (1997) assessed the effect of social behaviours and positive peer relations on students in Grades 4 and 6. They found that higher social
behaviours and peer relationships had positive unique contributions to academic achievement whereas aggression-disruption had significant negative unique contributions to academic achievement. In their study, Grade 4 students who were aggressive and acted out were more likely to have had lower academic achievement in Grade 6, and students with higher academic achievement in Grade 4 were more likely to have had lower levels of aggression in Grade 6. Students who were rejected had the lowest academic achievement. These findings suggest that peer acceptance may be a social resource that facilitates academic achievement and that academic success or failure may affect whether peers are liked or disliked. Based on a review of studies of students with conduct disorder, Lynam and Henry (2001) noted that cognitive deficits contributed to behaviour problems and that neuropsychological deficits could cause serious antisocial behaviour but no studies indicated the converse. Having learning problems in Grade 1 was also found to be an independent risk factor for depressive symptoms in Grade 3 (Herman, Lambert, Ialongo, & Ostrander, 2007), and in Grade 7, especially for girls (Herman, Lambert, Reinke, & Ialongo, 2008). These findings suggested that learning difficulties preceded mood disorders. With evidence for behaviour proceeding learning problems and learning problems proceeding behaviour, the research remains inconsistent. Sutherland et al. (2008) concluded that this inconsistency has made it difficult to understand the impact of factors such as delivery of instruction and classroom context on academic achievement and behaviour.

2.3.3 The Schools’ Need to Address both Behaviour and Learning

Although schools are not responsible for meeting all needs of all students, “when the need directly affects learning, the school must meet the challenge” (The Carnegie Council on Adolescent Development, 1989, p. 61). Appropriate behaviour is one thing schools must address as students will have difficulty learning if they are demonstrating inappropriate social behaviour (Broughton & Lahey, 1978; Kauffman & Landrum, 2009). Thus, schools’ “ability to prepare students academically overlaps with their role to serve the social-emotional needs of their students” (Aviles, Anderson, & Davila, 2006, p. 35). As well, schools may be the only place in which these needs are met and they may be the agency that has the strongest vested interest in ensuring that children and youth do their best (Caccamo, 2000). Thus, schools must intervene and they must do so early enough so that dysfunctional patterns do not become entrenched (Hinshaw, 1992) and so that life outcomes for these children and youth can be optimized.

The literature suggests that E/BD difficulties emerge early, often in childhood or in adolescence, and they are often experienced intermittently or persistently though life. In evidence, numerous studies reported that between 30-60% of individuals who met criteria for a specific mental health disorder in childhood also met criteria for that or a similar disorder in late adolescence or in adulthood (Bardone, Moffitt, Caspi, Dickson, & Silva, 1996; Barkley, Fischer, Edelbrock, & Smallish, 1990; P. Cohen, J. Cohen, & Brook, 1993; Esser et al., 1990; Harrington, Fudge, Rutter, Pickles, & Hill, 1990). The World Health Organization (WHO) also reported that up to 50% of all adult mental disorders had their onset in adolescence (Belfer, 2008).
The age of first behavioural difficulty was found to be related to overall level of problems as individuals who experienced problems earlier on were found to have had more difficulty later on than did those whose problems emerged later on (K. K. Leitch, 2007). In the U.S., the average age at which students with E/BD first encountered difficulties was determined from the Special Education Elementary Longitudinal Study and the National Longitudinal Transition Study-2, that derived data from teachers, school records, students, and their parents (Wagner et al., 2005). This study found that the average age of first difficulty was 4.6 years, the average age for first being serviced by a professional for a disability was 6.2 years, and the average age for receiving special education services was 7.8 years. For secondary school youth identified with E/BD, the average age for first having difficulties was 6.4 years, the average age for first being seen by a professional for a disability was 8.1 years, and the average age for first receiving special education services was 9.0 years.

Although mental health disorders were often first experienced early on in the lives of children and youth, intervention to address their concerns was often not received early enough (if it was received at all) and when it was received, it was most often received at school. In Canada, in 1989, Offord et al. noted that in Ontario, only one in five children with a psychiatric disorder had received mental health or social services support for their illness during the preceding six months. More than a decade later in Canada, an estimated 75% of children with mental health disorders still did not access services or only received them in school where the capacity of the system to deliver effective treatments was limited (The Standing Senate Committee, 2004; Waddell et al., 2005). This support in schools was received in various ways. In BC, the McCreary Report stated that 44% of students surveyed felt they could seek support from teachers, 28% from school counsellors, and 20% from other school staff. According to a study conducted in Montreal, 56.6% of parents reported that emotional support was given to their children within the school environment through warm relationships, positive reinforcement, and encouragement, most often from teachers (Jutras & Lepage, 2006).

In the U.S., between 70-80% of children who did receive mental health services received them in school (Burns et al., 1995). A study by E. M. Z. Farmer, Stangl, Burns, Costello, and Angold (1999) reported that approximately 20% of children had used some mental health service from some service sector in the previous year. Of those who had received service, 66% had received it from only one service sector. For approximately half of the 12% who had received service from the school system, this was the only help they had received. In a school based survey, Dubow et al. (1990) reported that 63% of high school students had received help from their teachers, 59% from their guidance counsellors and 40% from their principal. In a U.S. study of youth aged 12-17, over half of the youth reported that they had received mental health services in school (S. Foster et al., 2005). The six most frequent areas for which they received service were:

- adjustment issues;
- social, interpersonal, or family problems;
- anxiety, stress, or school phobia;
- depression, grief reactions;
- aggression or disruptive behaviour; and
behaviour problems associated with neurological disorders. In Australia, the Western Australian Study found that of the students with behaviour ratings in the clinical range, only about half had received a service for their health concerns during the previous six months and only 17% had received a mental health service (M. G. Sawyer et al., 2001). The services most frequently received are listed in Table 5.

Table 5  Service Usage Described in the Western Australian Study

<table>
<thead>
<tr>
<th>Services Attended</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Doctor</td>
<td>13%</td>
</tr>
<tr>
<td>Counselling in School</td>
<td>12.1%</td>
</tr>
<tr>
<td>Paediatrician</td>
<td>11%</td>
</tr>
<tr>
<td>Private Psychologist/Social Worker</td>
<td>8.7%</td>
</tr>
<tr>
<td>Mental Health Clinic</td>
<td>4.9%</td>
</tr>
<tr>
<td>Special School or Class</td>
<td>4%</td>
</tr>
<tr>
<td>Private Psychiatrist</td>
<td>4%</td>
</tr>
<tr>
<td>Hospital Department of Psychiatry</td>
<td>3.2%</td>
</tr>
<tr>
<td>Other Community Health Services</td>
<td>8.7%</td>
</tr>
<tr>
<td>Other School-Based Services</td>
<td>4.2%</td>
</tr>
<tr>
<td>Other Hospital-Based Outpatient Service</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

In the literature, reasons described for students receiving no outside service included:
- a belief by students that they were able to handle their problems themselves, their problems were too personal to tell anyone, and/or their problems could not be helped (Dubow et al., 1990);
- a belief that the information they shared would not be kept confidential and that their parents would find out about their concerns (Dubow et al.; Stiffman, Eize, Hadley-Ives, & Johnson, 1999; J. F. Smart & D. W. Smart, 1991);
- cultural and/or religious factors that discouraged outside involvement (J. F. Smart & D. W. Smart); and
- limited access to, or availability of, professionals (The Standing Senate Committee, 2004).

2.3.4 Interventions Recommended for Supporting Students with E/BD

As learning and behaviour are so closely related, and, as school systems need to address both so that students can learn, it is important to recognize practices effective to improve student behaviour. Kauffman, Lloyd, Baker, and Riedel (1995) described the most effective programs for students with E/BD as having:
- systematic, data-based interventions;
- continuous assessment and monitoring of progress, often with the student monitoring his or her own progress in addition to staff monitoring;
- treatment matched carefully and specifically to the nature and severity of problems;
- coordinated multi-component treatment that addresses academic skills; social skills; social and family services; counselling or psychological therapy; and medical treatment;
- frequent guided practice of academic and social skills in safe settings with progression to more difficult settings;
- programming for transfer and maintenance to improve and maintain behaviour improvements; and
- commitment to prolonged sustained intervention.

Sugai and Horner (2008) noted that effective practices and systems for addressing learning as well as social outcomes while preventing problem behaviours were: school-wide; research-based to real living, teaching, and learning environments; organized on a continuum; and comprehensive. They included self-assessment, continuous progress monitoring, systematic data-based decision making, and were supported directly and formally. A review of scientifically supported practices for students with E/BD that increased social behaviours or decreased inappropriate social behaviours was conducted by Lewis, Hudson, Richter, and Johnson (2004). Effective practices listed were:

- opportunities to respond during instruction
- praise/positive environment
- positive behaviour support/social skills instruction
- functional behavioural assessment-based interventions
- self-management/monitoring
- curriculum-based assessment/measurement
- learning strategies instruction
- direct instruction
- components of behaviour management systems
- use of procedures and routines
- effective lesson components
- mediated scaffolding
- curricular and material modifications
- systematic, data-based interventions
- continuous assessment and monitoring of progress
- provisions for practice of new skills
- treatment matched to problem
- multicomponent treatment
- programming for transfer and maintenance
- commitment to sustained intervention (pp. 301-302).

The research literature also suggested practices to support students with behaviour problems. Classroom practices that were recommended in the literature:

- implemented start of year classroom management activities (Gettinger & Seibert, 2002);
• had fair, positive discipline; established classroom rules; eliminated unessential rules; set high behavioural expectations and provided support for students to achieve these (Gettinger & Seibert; Jenkins, 2006);
• developed smooth transitions between activities (Gettlinger & Seibert);
• helped students gain academic knowledge and skills (Heward, 2003);
• made efficient use of learning time (Gettinger & Seibert); used effective instruction, monitored academic work, and provided positive feedback about the work (Levy & Vaughn, 2002);
• focused on promoting positive instructional strategies (Gettinger & Seibert);
• didn’t give under challenging work intended for students with learning disabilities (Tarico et al., 1989);
• provided a curriculum that incorporated the students’ own interests and issues in developing assignments (E. M. Z. Farmer & T. W. Farmer, 2000; Razeghi, 1998) and gave students choice in tasks (Munk & Repp, 1994);
• provided task variation or mixed previously mastered tasks with new tasks (Munk & Repp);
• helped students replace anti-social and maladaptive behaviours (Heward, 2003) through social skill and behaviour modification (Kauffman & Landrum, 2009; Polloway, Patton, & Serna, 2001); as well as through modelling and rehearsing targeted behaviours with social reinforcement and programming for maintenance with generalization incorporated into academic instruction (Maag, 2006);
• provided students with structured and predictable routines; a consistent schedule; rules and consequences; as well as clear behavioural expectations (Hewett, 1966);
• gave students voice in identifying discipline and classroom management practices that assisted them in keeping calm and focused so they could be on task and complete their schoolwork (Jenkins); and
• implemented sound amplification systems in which the teacher wore a microphone and the teacher’s voice was amplified in the classroom (Maag & Anderson, 2006).

Schools and systems that were recommended for students with E/BD:
• had a strong academic focus which was associated with lower conduct and oppositional problems as well as lower student alcohol use (Kasen, Johnson, & Cohen, 1990);
• had a positive attitude towards racial differences and were perceived as fair (A.D. Benner et al., 2008);
• had teachers and administrators who were sensitive (Kasen et al.); helpful; patient; humorous; fair; built positive bonds between themselves and their students (Jenkins); and believed in them (Levy & Vaughn, 2002);
• welcomed and transitioned students into schools and classrooms (Eanes, 2005);
• provided students with opportunities to build relationships with peers and teachers (Sanger, Maag, & Shapera, 1994);
• provided ways for students to be helped when they were having a bad day (Jenkins);
• provided opportunities for students to talk about emotional problems (Kasen et al.);
• had teachers and administrators set and support high academic expectations (Jenkins);
• took time to have students understand classroom rules for all classrooms and didn’t assume generalizations occurred across settings or classes; had students learn expectations, rules and scripts/routines for classes (Sanger et al.; P. L. Bennett, 2006);
• provided consistency among staff (Bennett);
• used transition times between classes to interact, ask questions, follow up on instructions, have conversations, introduce topics, and change topics appropriately (Sanger et al.);
• used pictorial representation or printed cues for therapy; repeated the student’s verbalizations and when the student was frustrated, moved on; responded to the feelings being expressed in a patient way (Giddan, Milling, & Campbell, 1996);
• provided a variety of service delivery system options including: alternative education programs; lower student-teacher ratios; a variety of instructional methods; programs to improve academic skills and systems to help “at risk” students; a school within a school, and community-based learning options (Martin, Tobin, & Sugai, 2002); as well as,
• provided job awareness, exploration, preparation, and orientation; used resource people within the school as well as parents and others within the community with different occupations to provide mentorship for jobs; provided school as well as post school vocational services and career education that helped place students into jobs following graduation; gave students training that oriented them to the world of work and satisfying career decisions that made their education more meaningful for them (Martin et al.; Razeghi, 1998).

2.3.5 The Emphasis on Behaviour

Although the close relationship between behaviour and learning is recognized, school systems and researchers in the U.S. have emphasized the remediation of weak social skills, emotional difficulties, and behaviour deficits of students with E/BD far more than their learning needs (Gunter et al., 1993; Levy & Chard, 2001; Shores et al., 1993; Templeton et al., 2008; Walker et al., 1992; Wehby, Lane et al., 2003; Wehby, Symons et al., 1998). Classrooms for students with E/BD in the 1980s in the U.S. were described by Knitzer, Steinberg, and Fleisch (1990) as focusing almost exclusively on behaviour management in a “curriculum of control”, with the near neglect of academic instruction, the ignoring of the use of effective teaching practices, and the neglect of teaching of essential academic skills such as reading. This neglect of the academic needs of students with E/BD in order to focus on the control and elimination of their problem behaviours was recognized by the others as well (Barton-Arwood, 2003; Faris-
As stated, the term emotionally disturbed, refers to students whose educational achievement is adversely influenced by some type of inappropriate behaviour. Unfortunately, it appears that the focus on inappropriate behaviours that affect achievement has led to an almost exclusive focus on behaviour problems, with little attention given to the educational needs of this population. In other words, the notion that students' behaviour must be controlled before they can be taught has become the prevailing approach in the treatment of students with emotional and behavioural disorders (E/BD) (p. 194).

This almost exclusive focus on behaviour problems was blamed for the extremely poor outcomes that students with E/BD had in school (Wehby, Lane et al.). As Levy and Chard (2001) claimed,

So much attention has been devoted to managing disruptive behaviours and dealing with emotional crises that the questions of what the students should be taught and how they should be taught are often not afforded careful or even sufficient consideration [and, the] educational services for students with EBD often do not provide them with the supports that would enable them to succeed (p. 438).

This concentration on ways to control and eliminate the problem behaviours of students with E/BD occurred in the U.S. despite the requirement for schools to pursue specific indicators of success for all students including “grades, promotion, graduation, dropout and re-enrolment rates, changes in intensity, level of special education services, enrolment in special education, truancy, [and] days absent” (Nabors, Weist, Tashman, & Myers, 1999, p. 489). Kauffman et al. (1995) suggested that this emphasis on behaviour interventions as opposed to concentrating on both behaviour and academics may have resulted from students with E/BD being placed in programs where disruptive behaviours were not controlled, which gave teachers no opportunity to teach both the academic and social skills the students required. It may also have resulted in part from the limited researched interventions available to help rectify the situation (Wehby, Falk et al., 2003).

Although there is vastly more information available about the behaviours of students with E/BD than about their academic learning (Levy & Chard, 2001), research has suggested that focusing on both academics and behaviour as well as integrating academic and non-academic instruction for students with E/BD may result in better outcomes for them (Gable, Hendrickson, To, Nelson, & Van Acker, 2002). In fact, some interventions that targeted the remediation of academic skills were found to reduce problem behaviours (Coe & Krehbiel, 1984; DuPaul, Ervin, Hook, & McGuey, 1998) as
when students were engaged in academic learning they were not exhibiting inappropriate behaviour in class. Examples from research studies included:

- students with ADHD who were involved in classwide peer tutoring became more academically engaged and reduced their off task behaviour (DuPaul et al.);
- students with externalizing behaviours who received phonological awareness training improved both their reading and their behaviour (K. L. Lane, O’Shaughnessy, Lambros, Gresham, & Beebe-Frankeberger, 2001); and
- students with problem behaviours who were involved in curriculum-based assessment programs with sound instructional techniques exhibited fewer problem behaviours (Tyler-Wood, Cereijo, & Pemberton, 2004).

### 2.3.6 Academic Interventions

Some interventions to improve the academic skills of students with E/BD were found in the literature although their effectiveness was often not established. Ryan et al. (2004) reviewed the effectiveness of peer-mediated interventions on the academic functioning of students with E/BD. They reported effectiveness for a number of interventions including peer tutoring and cross-age tutoring but noted that peer assessment, peer modeling, and peer reinforcement had yet to be proven effective for students with E/BD. Mooney et al. (2004) reviewed reviews of treatment outcomes for students with E/BD and concluded that collectively strong treatment outcomes were found for teacher-, peer-, and child-mediated academic interventions. Examples of teacher-mediated academic interventions included token economies, structured instructional systems, and story mapping. Peer-mediated academic interventions included class-wide peer tutoring, cross-age tutoring, and cooperative learning. Child-mediated academic interventions included self-regulated learning interventions where an individual was taught to act purposefully and strategically for their own benefit. Mooney, Ryan, Uhing, Reid, and Epstein (2005) concluded that targeted interventions could positively impact the academic achievement of students with E/BD through use of self-management interventions that included self-monitoring, self-evaluation, self-instruction, goal-setting, and strategy instruction. Peer tutoring, specifically, where pairs of students worked together to practice activities previously taught to them by their teachers (Barton-Arwood, 2003; Wehby et al., 2005) was found to provide increased opportunities for practice and response. Benefits included: increased time engaged in academic tasks; frequent feedback about academic performance; reduction of acting-out and off task behaviours; building of fluency in basic skills; increased rates of correct responding; and, the learning of self management techniques (King-Sears & Cummings, 1996).

The following general suggestions were made for supporting the learning of students with E/BD:

- use teacher-directed instruction (Nelson, Benner, & Cheney, 2005);
- ask frequent low-level questions (Nelson, Benner et al.);
- provide teacher feedback (Nelson, Benner et al.);
- use lessons with a scope and sequence (Nelson, Benner et al.);
- provide simple and conspicuous instructional strategies (Nelson, Benner et al.).
• use mediated scaffolding (Nelson, Benner et al.);
• review instructional material judiciously (Nelson, Benner et al.);
• teach skills directly and systematically (Lloyd, Forness, & Kavale, 1998);
• teach mnemonic strategies for understanding and remembering (Lloyd et al.);
• monitor progress (Lloyd et al.);
• provide positive consequences for improvement (Lloyd et al.);
• use cognitive behaviour strategies (Lloyd et al.);
• wait for a predetermined amount of time before prompting for the desired response (McCurdy et al., 1990);
• use a “trial and error” method where the student is required to attempt a response (McCurdy et al.);
• give praise as well as tokens to be used for play time (McCurdy et al.);
• use graphic visualizations of students’ progress to motivate (Allen-DeBoer, Malmgren, & Glass, 2006);
• use fast pace instruction with many opportunities for correct responding using alternating low probability with high probability tasks (Munk & Repp, 1994);
• teach parts of tasks over a period of time rather than the whole task repeatedly (Munk & Repp);
• teach new information in a way so that errors and frustration are reduced (Munk & Repp);
• use techniques that include student choice, high interest, and strategy instruction (e.g., mnemonics, cover-copy-compare, time delay, modeling correct academic responding, dialogue journals, story mapping, guided notes, and repeated reading) (Wiley, 2008);
• screen students for processing speed deficits (A. D. Benner et al., 2008); and
• implement interventions that increase neurological activity in areas of the brain that regulate information processing, particularly the left hemisphere occipitotemporal systems (Shaywitz et al., 2004).

2.3.7 The Cognitive Profile of Students with E/BD

In order to address the learning needs of students with E/BD it is important to understand their cognitive profiles. Research found that in the U.S., the overall cognitive ability of children and youth with E/BD fell in the average to low average range (Kauffman & Landrum, 2009). In a series of studies that assessed special education students identified with E/BD, their full scale intelligence ranged from a mean of 88.8 in elementary school (Mattison, Hooper, & Carlson, 2006); to a mean of 87.5 +/- 15.6 (with a range of 48 to 122) in middle school (Mattison, 2004); to a mean from 90.3 to 99.0 in secondary school (Mattison, Spitznagel, & Felix, 1998). The secondary school study noted that the mean intelligence scores of students with E/BD who were successful were significantly higher than the scores of those who were unsuccessful, and those who were unsuccessful in school presented with verbal scores that were significantly lower than their performance scores by 11 or more standard scores in a significantly higher
percentage of the unsuccessful group compared to the successful group. As the mean cognitive level rose over the three studies from elementary to middle to secondary school, it may have been that higher intelligence was associated with staying in school or it may have been that as the cognitive demands of the curriculum increased in high school, more able students who encountered mental health difficulties struggled in school and were then identified with E/BD by school systems. B. B. Duncan, Forness, and Hartsough (1995) found that in two school-based treatment programs for students with E/BD aged 6-19, the mean intelligence of the students was 94.0. These studies give evidence that the mean cognitive ability of students with E/BD in the U.S. fell in the average range, however, the means in these studies were lower than the mean of 100 in the general population.

Lower cognitive ability was specifically found to be related to delinquent behaviour and to be a significant predictor for delinquency (Gibson & West, 1970; Hirschi & Hindelang, 1977), whereas higher cognitive ability served as a protective factor against delinquency for aggressive boys (J. L. White, Moffitt, & Silva, 1989). The relationship between aggressive behaviour and cognition was researched by Huesmann, Eron, and Yarmel (1987). In their study of children with aggressive behaviour over 22 years, they noted that both aggression and intellectual functioning were reasonably stable throughout a person’s lifetime and were perpetuated within marriage pairs and across generations. They hypothesized, as did others (e.g., Hirschi & Hindelang, 1977), that low intelligence increased the likelihood of learning aggressive responses and that aggressive behaviour made ongoing intellectual development more difficult. This was believed to be because individuals with lower intellectual ability found it more difficult to devise alternative strategies to obtain a desired goal. Hirschi and Hindelang hypothesized that aggressive responding interfered with the social interactions of these students with their teachers and peers, which, in turn, affected intellectual advancement and school achievement. They also hypothesized that aggression and intellectual functioning were possibly the result of performance failure in school that negatively affected scores on intelligence tests.

Some studies described the specific areas of cognitive deficits in children and youth with conduct problems. In a longitudinal project that studied a cohort of over 1000 individuals from birth to age 21 in New Zealand, a neuropsychological assessment battery administered to the cohort at age 13 found that males with severe conduct problems exhibited high levels of neuropsychological impairment in verbal measures (word comprehension, classification, abstract reasoning with new ideas, and manipulating symbol codes); visual-spatial areas (measuring deductive reasoning from pictures, copying a complex design and then reproducing it later from memory; applying a strategy to solve mazes); as well as in verbal memory areas (measuring the number of trials needed to memorize a list of common nouns and the number of nouns recognized later when heard in a story) (Moffitt, Lynam, & Silva, 1994). In this project, neglected children did not differ from popular and average children in their cognitive profiles. Lahey et al. (1995) described the cognitive differences amongst individuals with a conduct disorder, those who had committed a delinquent act, and those who had other disorders. They found that delinquent youth were lower in intelligence, particularly in
verbal intelligence, and when a conduct disorder was maintained for 10 or more years, lower intelligence was found to be a factor. In another study, Lynam and Henry (2001) found that one of the most robust correlates of severe conduct problems was impaired verbal ability and/or executive functioning, and that there was significant evidence for a specific deficit in language manipulation that could be interpreted as evidence for dysfunction of the left cerebral hemisphere.

A number of studies explored the particular areas of cognitive weakness in students with E/BD. In a study of Canadian children aged 6-12 with externalizing and internalizing problems who had received services from a family health centre, Szatmari, Offord, Siegel, Finlayson, and Tuff (1990) assessed their neurocognitive functioning by means of a battery that included measures of visual-perceptual processing and problem solving. They found no neurocognitive differences between the children with ADHD and the children with conduct disorders, but the deficits in these two groups were greater than the deficits of the children with internalizing disorders. In another study of children with mental health disorders who lived in residential care facilities, Campbell (2004) found that the children had particular weakness in: memory (impaired verbal memory and lower non-contextual nonverbal memory); processing speed; executive functioning (attentional); and visual motor integration. G. J. Benner, Allor, and Mooney (2008) researched the processing speed of students with E/BD in a sample of students from Kindergarten to Grade 12. They noted that adequate processing speed enabled learners to perform basic tasks without consciousness so that they could focus on more complex tasks. Their study assessed the students on tests of rapid automatic naming and academic fluency in reading, math, and writing. Previous assessment information was used to ascertain levels of visual processing, working memory, long term memory, and executive functioning. G.J. Benner, Allor et al. found that 57% of the students showed evidence of an academic processing speed deficit and 79% of the students scored below the mean on an assessment of academic fluency. They also noted that students who exhibited academic fluency deficits in reading, math, and writing were more likely to experience total externalizing and attention problems than those who experienced academic skill or language deficits. For students with externalizing problems, their academic processing speed deficits predicted all social adjustment domains. G. J. Benner, Allor et al. concluded that deficits in academic fluency impacted the overall social adjustment of the students more than did their language or academic skill deficits. A rationale for students with E/BD having difficulty with concentration was suggested by Ma (1999) who hypothesized that when students with E/BD experienced elevated anxiety, they were physiologically aroused such that as they narrowed their focus of attention on a perceived threat and their concentration was lessened or impaired on nonthreat stimuli such as on academic tasks. This narrowing of focus has been described by Repie (2005) as interfering with recall of previously mastered academic knowledge and the ability to learn in school.
2.3.8 The Language Profile of Students with E/BD

Children and youth with E/BD commonly experience language related issues just as many children with language disorders commonly experience E/BD (e.g., Baker & Cantwell, 1982, 1987; Cantwell & Baker, 1977; Donahue, Cole, & Hartas, 1994; Giddan et al., 1996; Sanger et al., 1994; Sturge, 1982). Some research found that females with speech/language impairment were at greater risk for psychiatric disorder than were males with these impairments (Beitchman, Hood, & Inglis, 1990). The linkages between language and E/BD were described in the areas of expressive, receptive, and pragmatic language. Expressive language disorders were also specifically described by the Association (2000) to be a risk factor comorbid with externalizing emotional disturbance. In evidence, individuals with expressive language disorders were described to have language output not adapted to the needs of the listener; difficulties in introducing, maintaining, and changing topics; as well as a lower number of socially positive utterances in interactions, and insufficient verbalization during tasks that required planning and organization (Gallagher, 1999). Children with ADD were also found to have significant difficulties in expressive language tasks related to their social competencies (Bain, 2001). The link between E/BD and language disorders was thought to be related to environmental factors such as parental management; peer, neighbourhood, and school effects; as well as genetic factors, which may be neurologically linked when confronted by high risk environmental factors (Beaver, Delisi, Vaughn, Wright, & Boutwell, 2008).

Receptive language deficits in which a student has difficulty understanding and following directions, in not understanding more complex sentences, or in requiring clarification, or having instructions or directions repeated, were commonly found in students with E/BD (e.g., N. J. Cohen, Davine, Hondezsky, Lipsett, & Isaacson, 1993). Pragmatic language difficulties were also described for students with E/BD, as these students sometimes experienced difficulties with “understanding context; changing language according to the needs of a listener or situation; conveying intents; using language for different purposes such as greetings, requests, or commands; and using rules for participating in conversations" (Sanger et al., 1994, n.p.). Thus, students with E/BD may not understand directions well and may lack the language skills to ask for clarification. There may also be a mismatch between their language skills and those of their teachers, other students, the curriculum, and the texts. These mismatches may affect their interactions with others.

Early work exploring the relationship between language and behaviour was conducted by L. Baker, Cantwell, and Mattison (e.g., L. Baker & Cantwell, 1982; 1987; Cantwell & Baker, 1977; Baker, Cantwell, & Mattison, 1980; Cantwell & Baker, 1991; Cantwell, Baker, & Mattison, 1981). In a community clinic for individuals receiving speech and language service, Cantwell and Baker (1977) analyzed information from 600 children with a mean age of 5 years, 7 months. They found that the children with pure language disorders as well as those with speech and language disorders had higher rates of psychiatric disorders than those with pure speech disorders, and the children with the first two disorders experienced more difficulty communicating with others. In a
subsequent study by Baker and Cantwell (1987), of the 600 children who were referred to a community clinic in the 1977-80 study, 53% of the pure language disordered group and 30% of the speech and language disordered group had a psychiatric disorder but only 29% of the speech disordered group had some form of psychiatric disorder. Baker and Cantwell concluded that speech and language difficulties were significantly associated with psychiatric illness. They found that children with speech and language difficulties more frequently experienced separation anxiety disorder, avoidant disorder, and/or adjustment disorder, and had significant problems in making friends as well as in coping with situations they didn’t like (Cantwell & Baker, 1991). The speech disordered children were more likely to have an adjustment disorder, avoidant disorder, and/or an overanxious disorder. L. Baker and Cantwell (1987) reported that the 50% of the children referred to the clinic who were psychiatrically ill experienced significantly more disorders in language than the other 50% who were not psychiatrically ill, and those who were not psychiatrically ill experienced more speech disorders.

The relationship between developmental language disorders and emotional problems in children was studied by Benaisich, Curtiss, and Tallal (1993). In their study of children at age 8, based on ratings of their behaviour at age 4, they did not find that early language impairment predicted E/BD status at age 8. They did, however, find that children whose intelligence scores did drop were lowered most in nonverbal cognitive areas in the intervening time and these students had the highest behaviour problem scores. The researchers suggested that an increase in E/BD problems in children with early language impairment was statistically related to hyperactivity in both males and females, and social withdrawal in females.

In a study of elementary school students with E/BD in clinical settings, P. Cohen et al. (1993) found that 42% of the students experienced receptive language disorders and 29% experienced expressive language disorders. The language deficits of a majority of the students were clinically significant and were relatively stable across age and by gender. They also found that students with externalizing behaviours experienced receptive and expressive language skill deficits, whereas students with internalizing behaviours did not. Antisocial behaviours were also correlated for those with pure receptive language deficits.

The speech and language deficits of children and youth aged 3-12 who were admitted to a psychiatric hospital were examined by Giddan et al. (1996). Of the students sampled, 25% had a speech deficit, 9% had a language deficit and 25% had both types of deficits. Measurements of deficits were as follows: receptive vocabulary (25%), expressive vocabulary (26%), receptive syntax (21%), expressive syntax (21%), articulation (37%), fluency (23%), vocal quality (14%), vocal resonance (8%), and vocal prosody (2%). A high proportion of the children and youth had also experienced ear infections during early childhood.

A review of 26 studies on the prevalence, strength, durability, and nature of language deficits in children with E/BD was conducted by G. J. Benner et al. (2002). This review established that there was a co-occurrence between language deficits and behaviour. The review found that language deficits were common in students described as juvenile delinquents as well as in students who presented with antisocial behaviours.
and attention deficits. The review found that of children formally identified with E/BD, 71% experienced clinically significant language deficits and, of those with diagnosed language deficits, 57% were identified with E/BD. The identified deficits in the children were broad based and were in expressive, receptive, and pragmatic areas (usually based on a 1.5 to 2 standard deviation below the mean difference). Of importance to educators is that the overall mean prevalence rate of language deficits was 66% when researchers sampled children from clinical settings whereas it was much higher when students with E/BD in public school settings were sampled. In the public school samples, 88% of the students had expressive language deficits; 68% had receptive language deficits, and 86% had pragmatic language deficits. Comorbidity was either stable or increased over time, and prevalence rates varied depending on the placement, stringency of the criteria, and number of language measures used. G. J. Benner et al. concluded with four principal findings. First, children with pure language deficits, particularly comprehension related deficits, were at a substantially higher risk for antisocial behaviour, whereas those with expressive deficits were more socially withdrawn and anxious. Second, the difficulties of children with receptive language deficits often went undetected but these children were at substantially higher risk for reading difficulties. Third, the rate of language deficits in children exhibiting antisocial behaviours was 10 times that found in the general population. Fourth, children with language disorders had difficulty with initiating and maintaining interpersonal relationships throughout their lives due to their use of physical actions to solve interpersonal problems, their inability to comprehend and comply with repeated warnings, and their misinterpretation of communication which resulted in chains of miscommunication and antisocial behaviour. In another study, Nelson et al. (2005) examined the language skill deficits of students with E/BD in the school system. They sampled students from Kindergarten to Grade 12 with the Achenbach (1991) Teacher Report Form to determine the types of problem behaviours that were related to receptive and expressive language skills. Of their sample, 68% of the students met standard score or discrepancy criteria for a language deficit and these deficits were relatively stable over time. The students sampled were more likely to have expressive language deficits than receptive language deficits.

Interventions recommended in the literature for students identified with E/BD and concurrent language deficits included:

- early intervention (Lloyd et al., 1998);
- involvement of speech-language pathologists in the design, planning, and delivery of language interventions (Gallagher, 1999; Nelson et al., 2005);
- use of effective instruction principles (Nelson et al., 2005);
- assessment of semantic, syntactic, and pragmatic language (Rinaldi, 2003);
- focus on auditory processing of information to improve auditory sequencing for primary students (Rowe, Pollard, & Rowe, 2005). This intervention consisted of attracting the student's attention, speaking slowly, using short sentences with chunked information, pausing between sentences while maintaining eye contact, and using visual cues. In this intervention, the teacher waited for compliance
and, if after a pause a repeat for the information was required, the information was restated slowly and simply with regular encouragement being provided.

In order to improve vocabulary/language, the following suggestions for students identified with E/BD were made:

- use a variety of words to help students verbalize frustrations associated with complex language (Sanger et al., 1994);
- teach vocabulary to learn alternate words to describe concepts (Sanger et al.);
- teach a network of related concepts (Sanger et al.);
- be aware that elaborate or abstract vocabulary concepts may confuse (Giddan et al., 1996);
- teach words that have multiple meanings (Sanger et al.);
- use pictorial representation (Giddan et al.);
- when possible replace “why” questions with “what” questions (Giddan et al.);
- teach figurative language (Sanger et al.);
- use clear and distinct articulation with repetition as needed (Giddan et al.); and
- teach broad and varied emotional vocabularies (Gallagher, 1999).

In order to improve the language functioning of students identified with E/BD, the following suggestions were made:

- reduce background noise and gain attention by sitting at the same level as the student (Giddan et al.);
- speak at a moderate pace with brief pauses between phrases (Giddan et al.);
- monitor length of sentences to enable re-explanations (Giddan et al.);
- use simple and compound sentences rather than complex sentences with several clauses (Giddan et al.);
- teach social skills as a component of a language development curriculum by incorporating skill identification, modeling, practice, social reinforcement, and programming reinforcement (Rinaldi);
- teach students to communicate in socially acceptable ways (Gallagher);
- teach script or event based repertoire for difficult situations (Gallagher);
- provide practice opportunities for positive communication with appropriate consequences (Gallagher); and
- use pragmatic language interventions (Hyter, Rogers-Adkinson, Self, Simmons, & Jantz, 2001). Suggested lessons included: Grab Bag (describing something to someone who cannot see it; Step-by-Step Instructions (grabbing an item from a bag and telling a partner everything about the item); and, Negotiating (giving reasons why you should get your way).

### 2.3.9 The Reading Profile of Students with E/BD

Children and youth with E/BD frequently have reading difficulties; conversely, children and youth with reading difficulties frequently have behavioural difficulties (Arnold et al., 2005; Jorm, Share, Matthews, & MacLean, 1986; Kauffman et al., 1987; Maughan, Pickles, Hagell, Rutter, & Yule, 1996; McGee, Williams, Share, Anderson, & Silva, 1986;
D. Smart, Sanson, & Prior, 1996; Stanton, Feehan, McGee, & Silva, 1990; Swanson & Malone, 1992; Vaughn, Hogan, Lancelotta, Shapiro, & Walker, 1992; Wehby, Falk et al., 2003). In comparison to students with typical reading skills, students with reading difficulties were found to be more depressed (Maughan et al., 2003; Maughan, Rowe, Loeber, & Stouthammer-Loeber, 2003; Willcutt & Pennington, 2000), more anxious (Paget & Reynolds, 1984), and they exhibited more delinquent and more aggressive behaviours (Willcutt & Pennington, 2000). Nelson et al. (2004) found that E/BD students with externalizing behaviours in Kindergarten to Grade 12 exhibited wide ranging academic deficits and that 83% of the students in their study scored below the norm group on standardized measures of reading.

The Isle of Wight epidemiological study conducted by Rutter and Yule (1970) was key to establishing the relationship between behaviour and reading as it specifically established the link between underachievement and psychiatric disturbance. This study screened children aged 9-11 years for intellectual and academic retardation by means of group achievement tests. It also screened for psychiatric disturbance by means of parent and teacher behavioural questionnaires. Individual tests of randomly selected students, semi structured parent-and-child interviews, and additional adult ratings of the children thought to manifest psychiatric disorders were subsequently administered. The study found that 24% of the children with severe reading problems exhibited antisocial behaviour whereas only 5% of the general population exhibited this level of behaviour. Rutter and Yule noted that 9 and 10 year old children who experienced combined reading and behaviour problems were more similar in background than those with reading problems alone, and they concluded that the reading problems produced the behaviour problems. The Isle of Wight study methodology was replicated by Richman et al. (1975) who studied the linkages between cognitive-reading difficulties and behaviour problems in 3-year-olds who were then followed at ages 4 and 8. Richman et al. found that children rated by their parents and teachers as behaviourally deviant were more likely than nonidentified students to have both behavioural disturbances and learning problems at age 8.

A subsequent study by Sturge (1982) compared and contrasted 10 year old boys in London with and without reading and/or antisocial problems. This study found that 3.6% of the boys were delayed in reading and were antisocial, an overlap which was double that expected. The children described as “retarded readers” were poor at concentration, had motor restlessness, their mothers had higher levels of psychiatric concerns, and their homes had reduced numbers of books. These children had also experienced significantly higher rates of broken homes, family discord, and low socioeconomic status homes. Their fathers had also experienced higher rates of police, probation and/or psychiatric contact for their own concerns. Their teachers rated 47% of the boys with reading delays with antisocial or mixed behavioural problems, and 31% of the boys identified with antisocial behaviours with significant delays in reading. Boys with both reading delays and antisocial behaviours did not closely resemble the groups of boys with only reading delays or only antisocial behaviours.

Some research explored the nature of the relationship between E/BD and reading. Stott (1981) sampled Canadian children at school entry and found that children who later
developed reading difficulties had behaviour problems at school entry. He concluded that their behaviour problems had led to their reading difficulties as the children who were assessed with problem behaviours at school entry did not exhibit increased behaviour problems when they later had reading problems. Conversely, although Jorm et al. (1986) found that children who had reading problems at school entry had concurrent behavioural problems, primarily in the areas of attentional deficits and hyperactivity, he concluded that these children did not develop reading problems as a result of their behaviour problems at school entry. Fleming, Harachi, Cortes, Abbott, and Catalano (2004) suggested that students who had difficulty reading could develop E/BD as a result of their discouragement. Whether students developed reading problems as a result of their behaviour problems at school entry or not, ongoing reading difficulties were found to be associated with E/BD, and improvements in reading were found to improve behaviour, although reading problems were not found to be contingent on the severity of the behavioural problems (Vaughn et al., 1992). Antisocial problems and reading development were found to be specifically related, in that, “as one changes, so does the other” (Trzesniewski, Moffitt, Caspi, Taylor, & Maughan, 2006, p. 83).

Poorer early reading was specifically associated with an increased risk for conduct problems in middle childhood (K. J. Bennett, Brown, Boyle, Racine, & Offord, 2003) and continued poor reading predicted delinquency in adolescence (Hinshaw, 1992). In an examination of the relationship between intellectual performance and behaviour, Stanton et al. (1990) found that family adversity and lower pre-school intelligence predicted problem behaviours in the first year of school, however, reading scores predicted changes in behaviour during the primary school years with lower intelligence being predictive of behaviour problems at school entry but reading problems being more predictive of subsequent behaviour problems. Kellam, Rebok, Mayer, Ialongo, and Kalodner (1994) found that when the reading skills of boys identified with reading deficits improved, they showed fewer depressive symptoms than their peers who continued to have reading problems.

Children who were identified with behaviour problems and poor reading readiness skills at school entry frequently maintained both their behaviour and reading difficulties, and this pattern continued as they progressed through school. Bennett et al. (2003) found that low reading achievement in children assessed at school entry increased their risk of having conduct problems 30 months later. An 8 point increase in reading scores resulted in a 23% decrease in conduct problems once gender, income, and baseline conduct problem symptoms were controlled, however, the researchers did not rule out other confounding factors which may have explained the phenomenon. Morgan, Farkas, Tufis, and Sperling (2008) found that after statistically controlling for prior problem behaviours, poor attention, socioeconomic status, and demographic confounds, having poor reading readiness skills in Kindergarten, as well as being a poor reader by the spring of Grade 1, increased the likelihood of having problem behaviours by the spring of Grade 3. As well, poor task engagement elevated the likelihood of Grade 1 students being poor readers in Grade 3 and poor readers in Grade 1 were 12 times more likely to be poor readers in Grade 3. Children at most risk for displaying externalizing problems in both Grades 3 and 5 were found to enter school with both high
levels of problem behaviours and low reading readiness skills (Morgan, Farkas, & Wu, 2008). In a study by D. Smart et al. (1996) that examined the connections between reading disabilities and behaviour problems in students from Grades 2-4, reading disabilities remained stable over the length of the study, however, children with both reading disabilities and behaviour disorders had worse outcomes than those with either one or the other. In addition, students with both exhibited more ADHD type behaviours. D. Smart et al. found that children (particularly boys), with behaviour problems that occurred early and continued were at significant risk for developing reading disorders as approximately 25% of those with behaviour problems at school entry were identified with reading disorders two years later. As well, over 80% of those identified with reading disorders and behaviour problems in Grade 2 continued to have reading disorders in Grade 4.

In high school, both students with reading disorders and those with E/BD reported higher levels of depression, trait anxiety, and somatic complaints but not self-reported delinquent or aggressive behaviours (Arnold et al., 2005). Two years later, differences in rates of depression, anxiety or aggression were not noted between the students with reading disorders and those with E/BD, but the poor readers were described as being more inattentive as well as having somatic complaints and delinquent behaviours. Undheim and Sund (2008) found that students aged 12-15 with reading difficulties had higher levels of depressive symptoms and experienced more school stress, more worry, and lower school grades. They were also less attached to their parents than were the students without reading difficulties. In a study by A. A. Silver (1984), the oral reading ability of 68% of students with E/BD age 12 or younger was found to be below grade level but this increased to 77% in the population aged 13 or older. Trout et al. (2003) found that the reading fluency rate of students with E/BD was also lower than that of students without E/BD. Wagner et al. (2006) reported that the passage comprehension level was low in students identified as E/BD in the school system, averaging from the 24th to the 26th percentile.

By the time students with E/BD reached high school, their lags in reading were significant. Coutinho (1986) examined the reading achievement of students with E/BD over time and found that they were, on average, 1.5 to 2 grade levels below average in elementary school but about 3.5 grade levels below average in high school. Fessler et al. (1991) reported that 39.1% of children and youth aged 5-15 who were hospitalized for E/BD were significantly lower on standardized achievement tests of reading and language compared to their ability; as well, 38% had a learning disability and 17.8% had learning problems. In a study that examined student performance over time, Greenbaum et al. (1996) compiled descriptive data on children identified with E/BD from community mental health and school populations. They reported that the percentage of children with E/BD who read below grade level increased from 54% to 85% over the seven years of the study.

Some individual, family, and community characteristics of students with both E/BD and reading problems were identified in the literature. Students with both E/BD and reading problem were more likely to:

- be male;
• have a lower socioeconomic status;
• have more childhood maladjustment;
• have problematic family functioning;
• have a mother who was depressed;
• have a history of psychiatric hospitalization, and
• have a history of abuse to animals (Nelson et al., 2008; Trzesniewski et al., 2006).

Correlations of poverty, lower socioeconomic status, parental well-being, and maternal education with both reading difficulties and E/BD in 9-15 year olds were examined by Carroll et al. (2004). They found that literacy difficulties were more common in those from lower socio-economic backgrounds and that children in the lowest social class were almost 10 times more likely to have specific literacy problems than those from the highest social class. They also noted that children from families with poor emotional well-being or with mothers with low academic qualifications were more likely to have problems, which suggested to them that there was a genetic link to reading problems. Conversely, some characteristics of students identified with E/BD were protective against reading difficulties. For instance, although growing up in a low socioeconomic status family was positively related to reading problems, growing up in a high socioeconomic status family and in a stimulating environment with greater home literacy were protective factors against reading problems (Carrol, Maughan, Goodman, & Meltzer, 2004; Fleming et al., 2004; Noble & McCandliss, 2005; Rashid, Morris, & Sevcik, 2005; Trzesniewski et al.).

The link between E/BD and reading disorders has sometimes been attributed to the attention difficulties identified in some students with E/BD as well as in some students with reading disorders. The cluster of behaviours including impulsivity, hyperactivity, and poor concentration, commonly referred to as attention problems or ADHD (Fleming et al., 2004) have been linked to academic failure (Hinshaw, 1992; Barriga, Doran, Newell, Morrison, Barbetti, & Robbins, 2002; Frick et al., 1991; McGee, Silva, & Williams, 1984), and were frequently found to be comorbid with antisocial or externalizing behaviour problems (Angold et al., 1999; Hinshaw, 1992; Wehby, Falk et al., 2003; Willcutt & Pennington, 2000). In a study by Anderson, Williams, McGee, & Silva (1989), 62% of the 45 children classified as pervasively ADHD at age 11 were severely delayed in their reading. In a metastudy that examined comorbidity rates of ADHD with other disorders, Biederman, Newcorn, and Sprich (1991) reported the following rates of overlap or comorbidity: ADHD and conduct disorder (30-50%); ADHD and oppositional defiant disorder (at least 35%); ADHD and mood disorders (15% to 75%); ADHD and anxiety disorders (25%). This link between attentional problems and reading difficulties was maintained over time (Jorm et al., 1986; McGee et al., 1986; Stott, 1981; D. Smart et al., 1996) although increases in focus and on-task behaviours in the intermediate grades sometimes led to a reduction of acting out/delinquent behaviours in adolescence as well as to improvements in reading (Fleming et al, 2004).

ADHD was identified in 40% of students with E/BD and dyslexia, a disorder characterized by problems in word decoding, spelling, and rapid naming of known objects (Knivsberg & Andreassen, 2008). The study by Knivsberg and Andreassen
found that 50% of students with dyslexia had internalizing problems and 45% were rated with more total behaviour problems than students with E/BD without dyslexia. The study suggested that the inattention associated with ADHD may be the externalizing domain associated with conduct disordered students as students with hyperactivity and conduct disorder were significantly lower in reading achievement, and those with externalizing problems, particularly ADHD, also had major verbal deficits (Frick et al.; Werry, Elkind, & Reeves, 1987).

There may be other reasons why students with E/BD have reading difficulties. First, for students with both E/BD and reading difficulties, more emphasis may have been given to the management of their behaviour than to the instruction given to them in reading. If the schools provided little more than the “curriculum of control” described by Knitzer et al. (1990), limited time and effort may have been given to teaching them to read. In studies by Christenson, Ysseldyke, and Thurlow (1989) as well as by Ysseldyke, Thurlow, Christienson, and Weiss (1987), students with both E/BD and reading deficits received only about an hour a day of reading instruction, which was similar to the amount received by students without disabilities. Of the instructional time allocated to reading instruction for students with E/BD, not all of it may actually be devoted to the teaching of reading. In a study that observed teachers' instruction for students with E/BD, Levy and Vaughn (2002) found that 40% of the reading instructional time allocated for these students was used for independent seatwork using worksheets; that whole group instruction was common; and that more attention was placed on behaviour management than on reading. In a review of research on reading instruction practices for students with E/BD and learning disabilities, Vaughn et al. (2002) expressed concern that only one study was located on reading instruction for students with E/BD, which they stated attested to the limited information and emphasis in the field on the reading of this population. They also expressed concern that students with E/BD may be programmed to receive more reading instruction in resource room placements but in these settings there may be more time spent off task where students were out of the room; were waiting; were engaged in management chores; or were receiving independent seatwork and worksheets. Vaughn et al. found that limited time was spent on reading for students with E/BD and that even less time was spent on reading instruction that included instruction related to reading comprehension for them. Concern was also expressed by Al Otaiba and Rivera (2006) that many students with E/BD were taught in resource rooms where they encountered and practiced less vocabulary at their grade level, which interfered with their learning during class instruction. The resource room was also criticized for a lack of individualized or differentiated reading instruction that met the needs of individual students. In one study of students with disabilities in cooperative groups, fewer than 50% of the students worked successfully, which suggested that cooperative groups were an inefficient approach to learning for these students (O’Connor & Jenkins, 1996).

Another concern expressed in the literature was that reading interventions for students with E/BD had not been established in research, and therefore it could not be assumed that the reading interventions established as effective for most students were effective for students with E/BD (Al Otaiba & Fuchs, 2002; Nelson, Benner, & Gonzalez,
Indeed, numerous researchers have stated that interventions being implemented for students with E/BD have not been established as effective for them (Barton-Arwood, Wehby, & Falk, 2005; K. L. Lane, 1999; Nelson, Stage, Epstein, & Pierce, 2005; Wehby, Falk et al., 2003). For one specific intervention, structured reading, Barton-Arwood (2003) stated that there was limited evidence that this intervention improved the reading of students with E/BD but, as it increased engagement, it may have mediated behaviour for some. There may be evidence that interventions for students with learning disabilities are not effective for students with learning disabilities and E/BD. In evidence, Anderson et al. (2001) reported in their study that both students with learning disabilities and those with E/BD were initially below the norm in reading, however after five years of receiving special education services, only those with learning disabilities made significant progress in reading, despite the fact that students with E/BD received significantly more special education services. However, it may be that the reading deficits in students with E/BD are simply difficult to remediate. This was argued by Hinshaw (1992) who stated that there was clear evidence in the literature of an overlap between reading deficits and behavioural problems of an acting-out or externalizing nature, and that both of these were resistant to most intervention strategies. Hinshaw also reminded that as both of these caused major problems of childhood, and strongly predicted later maladjustment, it would be important to understand the underlying mechanisms of both.

One study by Forness, Kavale, Guthrie, Scruggs, and Mastropieri (1987) suggested that the decreases in reading ability over time found for students with E/BD may be avoided with intervention. In their study of children hospitalized for psychiatric disorders, they reported that 21% of the students were more than two years below grade level in reading, and 13% were between one and two years below grade level in reading. The mean intelligence of this group was in the middle to low 90s and their mean academic impairment was approximately a year behind. Of importance is that in the hospital setting their academic gains were close to normative expectations. The researchers concluded that the normative academic progress reported during psychiatric treatment “may only be possible under the best of treatment conditions in conjunction with a relatively intense, individualized school program” (p. 79). They also noted that these academic gains did not seem to be particularly useful in predicting subsequent school placement which may suggest that either the school did not recognize the gains when placing students or that the gains were not maintained.

One technique commonly suggested for students with E/BD is direct teaching. It is described as “a systematic method for presenting learning material in small steps, pausing to check for student understanding, and eliciting active and successful participation from all students” (Rosenshine, 1986, p. 60). The technique is highly structured and involves highly scripted and thought out lessons which, for any specific topic, determines what is to be taught, who is to be taught, the reinforcement to be given, the time allocated for practice, the way in which correction is to be given, with varying entry points established (Barton-Arwood et al., 2005; Engelmann, 1999; Hempern, 1996). Direct teaching was found to improve sight reading of words for students with E/BD in Grades 4-6 if the students were reading at least a grade below
their grade level (Yell, 1992). Trout, Epstein, Mickleson, Nelson, and Lewis (2003) used direct instruction for Kindergarten students determined to be at risk for E/BD and reading deficits, which resulted in these children outperforming both matched at-risk peers and other peers in their knowledge of letter sounds and blends as well as their achievement in sight word reading. For increasing reading fluency, Strong, Wehby, Falk, and Lane (2004) found that direct teaching improved the oral reading performance of students with E/BD in a junior high school setting. Conflicting with the direct teaching approach was the view that this skill based sequentially ordered approach unintentionally

...may limit the learning of children by not encouraging analytical or conceptual skills, by failing to nurture the ability to express oneself orally or in writing, by repetitively exposing children to the same material, or by failing to provide a larger meaning or purpose to learning” (Knapp & Shields, 1991, p.5).

Concern was also expressed by Barton-Arwood et al. that direct teaching had shown promise but it did not provide enough practice and engagement for students with E/BD. Other reading interventions recommended for students identified with E/BD included:

- peer tutoring, as when peer tutoring was combined with specific curriculum to work on phonological awareness, phonics, and fluency, moderate gains were obtained in students’ word fluency, sound naming, blending, and segmenting (Coleman & Vaughn, 2000; Falk & Wehby, 2001; Wehby, Falk et al., 2003);
- one-to-one tutoring (Dawson, Venn, & Gunter, 2000; McCurdy et al., 1990);
- guided reading interventions such as repeat oral reading, with rereading of passages with pre-established criterion, immediate teacher feedback and guidance three times daily (National Reading Panel, 2000). For students with E/BD, guided reading was to be at a 95% accuracy rate so as to maintain a high success rate (Al Otaiba & Rivera, 2006). Research by Dawson et al. (2000) reported that when reading was modeled by a teacher as opposed to a computer model or no model, students read statistically significantly more words correctly;
- phonics instruction with a focus on phonological awareness (Falk & Wehby, 2001; K. L. Lane & Menzies, 2003; K. L. Lane et al., 2001);
- story mapping to improve reading comprehension where characters, setting, problems, events, and outcomes in the narrative text were identified (Babyak, Koorland, & Mathes, 2000); and
- text mapping to improve reading comprehension skills by having students read a passage and initially complete a teacher generated text map then subsequently produce their own text maps (Stone, Boon, Fore, & Bender, 2008).

2.3.10 The Mathematics Profile of Students with E/BD

Students with E/BD are recognized for having difficulties in mathematics and for having below grade mathematical skills (Greenbaum et al., 1996; S. Silver et al., 1992;
The average mathematical calculation skill level of students with E/BD in elementary school fell at the 34th percentile, and the average calculation skill level for students with E/BD in high school fell even lower, at the 28th percentile (Wagner, Friend, et al., 2006).

Some reasons that students with E/BD were found to achieve poorly in mathematics have been suggested. In a meta-analysis of the relationship between anxiety towards mathematics and achievement in the subject, Ma (1999) found anxiety levels to be consistent across gender groups, grade level groups, and ethnic groups from Grade 4 on, and that mathematics elicited reactions from students that included panic, fear, anxiety, and embarrassment. Ma noted that few interventions for mathematics had concentrated on helping students overcome their cognitive difficulties in the learning of mathematics, which may have resulted in reductions in anxiety levels. Templeton et al. (2008) claimed that poor mathematics teaching had not made the subject meaningful and had not provided mathematics literacy for students, which may have caused the poor mathematics achievement for some students with E/BD. Specifically mentioned as problematic were the use of multiple-choice responses for complex mathematical principles and the use of modified worksheets and/or other seatwork (Lewis et al., 2004). Also mentioned was the effect of reducing the number of questions assigned to students in order to increase on task performance which did increase on task performance but had minimal impact on the number of correct responses (K. A. Miller, Gunter Venn, Hummel, & Wiley, 2003). In a review of 13 studies on mathematics interventions for students with E/BD by Hodge, Riccomin, Buford, and Herbst (2006) that included student directed interventions such as self-monitoring, self-management, and mnemonics, as well as teacher-directed instruction, peer tutoring, and computer-assisted instruction, it was noted that most interventions addressed basic mathematics skills but not strategies to increase performance in problem solving and higher order mathematics skills. The review did conclude that self monitoring and strategy instruction were effective as interventions for students with E/BD.

Various other strategies were examined in studies. One strategy examined by Montarello (2004) was the effect of interspersing a series of three easy problems amongst more difficult problems to create behavioural momentum which was paired with tangible reinforcement in order to assess its effect on problem completion rate and on the task behaviour of students with E/BD. The strategy was successful for some students but tangible reinforcement resulted in larger gains for other students. Scruggs and Mastropieri (1990) examined the use of visual imagery and auditory clues to recode and relate information to an existing knowledge base, a technique which resulted in a greater retrieval of the mathematics facts for students with E/BD. Cade and Gunter (2002) found that a musical mnemonic technique was effective for increasing the percentage of correct basic division facts attained by some students with E/BD. In this study, students were initially taught a tapping drill in which each finger was assigned a number. A song was subsequently developed to teach division facts and flashcards were created to accompany the teaching. Peer tutoring was another intervention which improved math worksheet completion rates and resulted in improved attitudes for both tutors and tutees (Franca et al., 1990). Direct teaching methods with teacher led
instruction were found to be effective to teach mathematics to some students with E/BD (Forness, Kavale, Blum, & Lloyd, 1997; Gunter, Coutinho, & Cade, 2002; Pierce et al., 2004). In a study to ascertain the effectiveness of direct teaching, computer-assisted instruction, and a combination of both to teach mathematics to secondary students with E/BD, G. Billingsley, Scheuermann, and Webber (2009) found that direct teaching was more effective for students with above-average intelligence than for those with lower intelligence, and for those who were only identified with E/BD and not a mathematics learning disability. For students with both E/BD and a mathematics learning disability, as well as for younger students, the combined method was found to be most effective. For two students in the study, the computer only method was found to be most effective. Thus, no one way of instruction was found to be most effective for all of the students.

2.3.11 The Writing Profile of Students with E/BD

Little research was located on writing interventions for students identified with E/BD. This was noted as well by Pierce et al. (2004). In a review of interventions to improve the literacy functioning of adolescents with E/BD, Griffith et al. (2008) located three studies on writing interventions published between 1965 and 2005. These studies were located and examined for review here. The first study by Glomb and West (1990) used a self-regulation strategy to improve the writing of two students in a resource room setting. This study showed moderate increases in the percentage of words written and the percentage of accurate sentences produced. The second study mentioned, conducted by Newstrom, McLaughlin, and Sweeney (1999), used a behavioural intervention to improve the writing of one Grade 9 student in a special education self-contained classroom, which resulted in an increase in the percentage of correctly capitalized and punctuated sentences. The third study mentioned, conducted by Schloss, Harriman, and Pfeifer (1985), used a behavioural intervention with direct instruction. This intervention improved the frequency of compositions completed for three 14-15 year old students in a special education placement. A fourth study was also located. This study, conducted by K. A. Miller et al. (2003), examined the impact of modifying a writing task. This study found minimal impact of using the strategy as the use of a model increased engagement and productivity but the increases were just as great when the provision of a model was applied to nonmodified tasks.

2.3.12 E/BD and the Relationship with Learning Disabilities

The literature reported a significant overlap between students identified with E/BD and students with learning disabilities (Cantwell & Baker, 1991; Fessler et al., 1991; Glassberg, Hooper, & Mattison, 1999; Goldstein, Paul, & Sanfilippo-Cohn, 1985; Kauffman et al., 1987; Prior et al., 1992). U.S. based studies found that between 38% and 75% of students identified with E/BD could be or were identified with learning disabilities, and between 24% and 52% of students identified with learning disabilities also experienced clinically significant social, emotional or behavioural problems (M. H. Epstein, Cullinan, Quinn, & Cumblad, 1994; Fessler et al., 1991; Glassberg et al.; Rock
et al., 1997; A. A. Silver, 1984; Wright-Strawderman & Watson, 1992). It is therefore suggested that the poor academic performance of students with E/BD may result from both their E/BD and their learning disabilities. It was suggested that while the former was recognized, the latter may have been overlooked unless an assessment of learning was undertaken (Glassberg et al.; Mattison, Hooper, & Glassberg, 2002). Conversely, there may be a significant number of students classified as having learning disabilities when they would better have been identified as students with E/BD (Forness, 2005).

Both students with learning disabilities and those with E/BD were commonly found to experience difficulties in cognitive processing, executive functioning, language functioning, social/emotional functioning, and academic functioning (Rock et al., 1997). When the academic performance of students with E/BD was compared to that of students with learning disabilities, it was unclear which group had more substantial academic deficits (M. H. Epstein & Cullinan, 1983; Gajar, 1979), or if there were significant differences between the groups (Fessler et al., 1991; Levy & Chard, 2001), although students with E/BD were sometimes described as having more homogeneous underachievement across subject areas rather than underachievement in specific areas as was more common in students with learning disabilities (Forness, Bennett, & Tose, 1983), and students with E/BD may not have progressed as well in reading as students with learning disabilities (Anderson et al., 2001).

Some studies examined the relationship between learning disabilities and behaviour. In a study of 11 and 12 year olds, Prior et al. (1992) found that over half of the children who were rated 1 standard deviation or more above the mean on at least one of the subscales of the Rutter scale by two or more informants had a learning disorder of some kind in comparison to 20% of the children who were rated no more than 0.5 standard deviations above the mean on any of the subscales by any of the informants. Children in the clinical group exhibited a 20 percentile point disadvantage on each academic measure and were more disadvantaged academically than the comparison group even when their performance was compared to those with learning disabilities. The group that was rated in the clinical range had a learning disabilities rate of 32.5% compared to 9% for those in the comparison group for arithmetic, and the rate was 42% versus 13.5% in spelling. Of students who were assessed with a mathematics disability, 68% had a diagnosed disorder compared with 31% of the students with a spelling disability.

The frequency of reading, mathematics, and writing disabilities in children with clinical disorders was reviewed by Mayes and Calhoun (2006). They found that the frequency of learning disabilities in students with ADHD ranged from 15% to 44% in reading, from 31% to 60% in mathematics, and from 65% and 60% in two studies of writing. Children referred because of their anxiety and/or depression had a learning disability rate of 18%, and those with a behaviour disorder had a learning disability rate of 19%. However, when ADHD was added, 73% of students with anxiety and/or depression as well as ADHD had a learning disability and 71% of the students identified with behaviour disorders and ADHD had a learning disability. Kavenagh (1994) found that from 25-50% of students with ADHD exhibited some degree of learning difficulty. Mayes and Calhoun found that 93% of children with an oppositional defiant disorder had
ADHD. Thus, having ADHD may be causal or correlated with both E/BD and learning disabilities, and ADHD appears to increase the impact of learning problems for both.

2.3.13 Academic Difficulties Associated with E/BD

Students identified with E/BD are recognized to have academic difficulties in school (Kauffman & Landrum, 2009; Repie, 2005). Of students with E/BD, those with internalizing behaviours were described to fare somewhat better academically than those with externalizing disorders (Davis et al., 2006; E. M. Z. Farmer, 1993, 1995; Huesmann et al., 1984; K. L. Lane et al., 2004). Research by Mattison, Spitznagel, and Felix (1998) found that when students had externalizing behaviours, described variously as aggressive or conduct disordered or oppositional behaviours, their academic achievement at both the elementary and secondary levels was affected. Their behaviours were also predictive of academic difficulties and lower rates of graduation (Vitaro, Brendgen, Larose, & Tremblay, 2005). Externalizing behaviours were found to be related to problems in reading, mathematics, and written language (Nelson et al., 2004). The onset, frequency, and persistence of behaviours were linked to academic performance as students identified with delinquent behaviours for a longer period of time experienced lower academic performance (McEvoy & Welker, 2000).

Although the research findings indicated that students who had internalizing behaviours did better in school than those with externalizing disorders, the literature clearly described how their behaviours affected academic success. Evidence that students with internalizing behaviours were successful in school was provided in a study by Nelson et al. (2004) who found that these students were not significantly weak in reading, mathematics or written language. As well, Chavira et al. (2008) found that students with internalizing behaviours had significantly higher gradepoint averages than students with high-incidence disabilities but these students were not different for disciplinary contacts, suspensions or unexcused lateness. In contrast to the general assertion that students with internalizing disorders did well in school, students who were anxious were found to have more academic difficulties, and to perform below their level of ability (Benjamin, Costello, & Warren, 1990; Ma, 1999; Schofield & Janney, 2008; Strauss et al., 1987). Ialongo, Edelsoh, Wortheramer-Larsson, Crocket, and Kellam (1994) followed a group of Grade 1 students identified with anxiety over a four month period. Although the students' anxiety levels were moderately stable over the period, their anxiety contributed significantly to their lower reading achievement and somewhat to their lower math achievement four months later. Conversely, in a study of anxious 6-13 year olds, reductions in anxiety were correlated with improved school performance and social functioning (J. Wood, 2006).

Some findings related to academics were described for students with other specific E/BD concerns. These included:

- Students with depression were found to be at risk for learning problems (Herman et al., 2007).
- Students who had experienced physical abuse, sexual abuse or neglect were noted to have higher levels of both internalizing and externalizing behaviours.
According to Glaser (2000), these students could have changes in brain function as a result of experiencing abuse which resulted in them exhibiting hyperarousal, aggressive responses, dissociative reactions, difficulties with aspects of executive functions, and educational underachievement.

- Students who had experienced abuse were at significant risk for poor academic performance, grade repetition, and disciplinary problems (Eckenrode et al., 1993; Wallach, 1994).
- Students who had experienced physical abuse were described as more aggressive and as functioning more poorly on cognitive tests (Cicchetti & Toth, 1995).
- Students who had experienced violence were found to achieve lower grades in school as well as to exhibit deficits in standardized test scores (Delaney-Black, et al., 2002).
- Students diagnosed with post traumatic stress disorder were reported to exhibit lower levels of scholastic performance across areas of achievement and to have difficulty remembering things and in paying attention in class (Saigh, Mroueh, & Bremmer, 1997).
- Students who had been neglected were described to be more anxious and inattentive, unable to understand their schoolwork, lacking in initiative and being dependent on their teachers for assistance, approval, and encouragement (Cicchetti & Toth).

In school, anxiety was found to interfere with giving oral reports, taking tests, concentrating on work, and doing homework (Langley, Bergman, McCracken, & Piacentini, 2004), however, anxious students were referred by teachers for evaluation and service less often than were students with disruptive behaviours (K. L. Lane et al., 2004). Interventions to reduce anxiety were implemented by Kiselica, Baker, Thomas, and Reedy (1994), who used progressive muscle relaxation, cognitive restructuring, and assertiveness training to measure their effects on the students’ anxiety, stress, and academic performance. Although the interventions resulted in improvements in affect, they did not affect the students’ academic achievement. Schoenfield and Janney commented on this study, stating that “unless anxiety interventions can also provide a corresponding increase in academic achievement, they are unlikely to be considered of any great importance in school settings.” (p. 598).

2.3.14 Learned Helplessness, Unhelpful Thinking Patterns, and a Lack of Engagement

A reduction in academic performance for students with E/BD may occur for a number of reasons related to their thinking, including learned helplessness, unhelpful thinking patterns and/or a lack of engagement.
2.3.14.1 Learned Helplessness

Students with repeated exposure to school failure are considered at risk for the development of a learned helplessness response style, which exists when individuals believe that their own behaviour has no influence on consequent events and they then believe that their motivational, cognitive, and emotional effects are independent (Maier & Seligman, 1976). Sutherland and Singh (2004) described this as a process in which, because of repeated academic failures, students doubted their intellectual abilities and concomitantly believed that they could not do anything to overcome these difficulties so they lessened their achievement efforts. However, when students who exhibited learned helplessness were reintroduced to high levels of reinforcement, it was noted that high levels of student responding ensued (Thompson, Iwata, Hanley, Dozier, & Samaha, 2003).

For students with E/BD, learned helplessness may lead to a negative reinforcement cycle in which students avoid “ineffective academic instruction” by acting out (Gunter Jack et al., 1994; Gunter, Shores, Jack, Denny, & DePaepe, 1994). Students with E/BD may then create contexts that elicit negative reinforcing behaviours from teachers, who, in turn introduce negative reinforcement while offering little in the way of academic stimuli or reinforcement. The students then believe that they are not required to perform to their ability level. As a result, they may then engage in an interaction pattern with teachers described as reinforcement-control interactions that further contribute to their learned helplessness because reinforcement occurred too infrequently.

2.3.14.2 Irrational Thinking Patterns

Students with E/BD may also exhibit thinking patterns that are unhelpful to their learning. For example, common patterns of thinking for students with anxiety and depression include:

- **overgeneralization**- evidence drawn from one experience or a small set of experiences that reaches an unwarranted conclusion with far-reaching implications
- **catastrophic thinking**- an extreme example of overgeneralization in which the effect of a clearly negative event or experience is amplified to extreme proportions
- **maximizing and minimizing**-the tendency to exaggerate negative experiences and minimize positive experiences in one’s activities and interpersonal relationships
- **all-or-none (black-or-white, absolutist) thinking**- an unnecessary division of complex or continuous outcomes into polarized extremes....
- **jumping to conclusions**-use of pessimism or earlier experiences of failure to predict prematurely or inappropriately in a new situation (also known as fortune telling)
• personalization-interpretation of an event, situation, or behaviour as salient or personally indicative of a negative aspect of self
• selective negative focus-“ignoring the evidence” or “mental filter”- undesirable or negative events, memories, or implications that are focused on at the expense of recalling or identifying other, more neutral or positive information (In fact, positive information may be ignored or disqualified as irrelevant, atypical, or trivial. (Friedman & Thase, 2006, p.359).

Students who habitually viewed the causes of bad events in their lives as stable in time, global in effect, and internal to themselves, were found to be especially vulnerable to passivity, cognitive deficits, sadness, lowered self-esteem, lowered assertiveness, and lowered competitiveness (Nolen-Hoeksema, Girgus, & Seligman, 1986).

2.3.14.3 A Lack of Engagement

Students with E/BD were often described as lacking engagement in their learning, although their lack of engagement may be characteristic of E/BD. In fact, improvements in engagement in learning may be more characteristic of recovery from a disorder as when individuals become more engaged in various activities and environments they may, as a result, participate more in them (Badesha, 2002). With recovery and increased engagement, their learning improves (Conway, 2006). In order to facilitate engagement to develop positive relationships and connectedness with others, students with E/BD need to feel safe emotionally and their environment needs to foster their self-esteem to allow them to feel save (M. H. Epstein et al., 1994; Pittman, Irby, Tolman, Yohalem, & Ferber, 2003).

To become engaged in school related activities, students with E/BD need to develop relationships with teachers characterized by warmth and open communication (Ladd & Burgess, 2001). These relationships may not, however, be easily available in high school where students with E/BD have numerous teachers (Adelman & Taylor, 1998), which, according to Aviles et al. (2006), makes it more difficult for them to receive the nurturing they require for them to feel confident enough to achieve academically. Thus, these relationships may be both difficult to develop yet key to recovery (Badesha, 2002) and school success.

A lack of engagement was found to be characteristic of students who eventually dropped out of school. These students were reported to see their school environment less positively, the school’s discipline practices less fair, the school’s treatment of students as less respectful, and the school as less friendly (Archambault, Janosz, Fallu, & Pagani, 2008; Jutras & Lepage, 2006). A lack of engagement was also found to be higher in Grade 9 students whose families monitored them more (A. D. Benner et al., 2008). Both the negative perception of school and the increased monitoring students with E/BD received from their parents and others may be factors that lead to dropout for them. A lack of engagement by students may also make the school less conducive to learning. In a study by Sutherland and Oswald (2005), students who were engaged or were perceived to be engaged during academic instruction were found to receive increased exposure to academic material, better tasks, and increased positive teacher
attention, whereas the opposite response was elicited by less engaged and/or disruptive students. Thus, students who were less engaged and/or disruptive may have received little incentive to become engaged in learning at school. One intervention suggested by Dunlap et al. (1996) to improve the engagement of students was to modify assignments, a practice which was found to improve engagement from 20% to 99%.

The construct of student engagement in class-related initiatives, extracurricular activities, and decision-making was examined by Finn (1989). Finn noted that behaviours such as skipping classes, truancy, being disruptive in the classroom, and juvenile delinquency, which were associated with dropping out of school, were also associated with poor school performance. As well, these behaviours were associated with students with specific learning disabilities, undiagnosed learning problems, inadequate ability, poor study behaviours, as well as with the students having received instruction that was deficient in some way. Finn diagrammed a frustration-self-esteem model in which deficient school practices led to unsuccessful school outcomes, which, in turn, led to reduced self-esteem and problem behaviours. When the problem behaviours were impacted by negative peer influences, the cycle led back to unsuccessful school outcomes. To disrupt this cycle, Finn suggested: the development of separate schools for at-risk youngsters, the revision of disciplinary procedures; the development of curricula tailored to student needs; the development of positive attitudes from teachers; and, the development of students’ attachment to school. Attachment to school was to be developed by participation in subject-related clubs, community activities, and athletic activities. Practices to be avoided included: having students excluded from participating in extracurricular activities, giving detentions that didn’t involve school-related work, suspending students, teaching students with methods that varied too much, and use of practices that addressed only strong students.

A Norwegian project by Thuen and Bru (2009) sought to change students’ perceptions of their learning environment by providing them with more influence over their learning and by giving them more responsibility for their learning. The project resulted in the students becoming more task oriented but according to reports, their externalizing behaviours also increased. Marginally positive results were obtained from increases in the teachers’ emotional support for the students, the students’ perception that the teachers had increased adaptations of the schoolwork, and the increased level of teachers’ guidance towards the students. More significant change was found when students perceived that they had influence over their learning. The positive results noted were: increased levels of student motivation, increased levels of students’ concentration, and marginally significantly less emotional problems as reported by the students (although there were more reports of externalizing problems by others). Restructuring of the learning environment was not followed by a general improvement in the students’ perceptions of the meaningfulness of schoolwork. Of interest was that those who failed in school were characterized by having fathers who were not interested in their school results at all, did not expect them to have good grades, did not praise good marks, and less frequently helped them with school tasks. Although both students who failed and students who passed could name teachers who were significant to them, only 25% of the students who failed compared to 50% of those who succeeded perceived their
teachers as role models for them, and half as many perceived their teachers as helpful in managing their everyday school problems. There was a high correlation between failure and a lack of parental support as well as a lack of adoption of a teacher as a role model.

The research literature suggested a number of techniques found helpful to increase student engagement. They included: giving students emotional support to deal with personal problems; praising, encouraging, and motivating students to be better at school; giving students advice; caring for students; and hugging students (Domagala-Zysk, 2006; Sutherland, Wehby, & Copeland, 2000). A study by Sinclair et al. (2005) investigated the effectiveness of a check and connect model to increase school engagement of urban high school students with E/BD. This study continuously and systematically assessed student levels of engagement through monitoring of attendance, suspensions, grades, and credits. The students also received individual timely intervention that focused on their educational progress as guided by check indicators. This intervention resulted in students being significantly less likely to drop out of school. Although students with E/BD were more likely to be present in school, they were more mobile and were more likely to attend two or more schools.

2.3.15 The Lack of Achievement Associated with E/BD

Students with E/BD do not achieve well in school. The literature has clearly established that students with E/BD are less academically proficient than their classmates (Hinshaw, 1992; Scott et al., 2001; Trzesniewski et al., 2006). This lack of academic proficiency is described for both males and females with E/BD (Nelson et al., 2004) and it hampers their progress through high school (Gunter & Denny, 1998). In fact, Kauffman et al. (1987) reported that only 30% of students with E/BD functioned at or above grade level in any academic area including: reading recognition, reading comprehension, arithmetic, and written expression. This lag in achievement was described as being from one to two grade levels (Coleman & Vaughn, 2000; Coutinho, 1986; Gunter & Denny, 1998; Levy & Vaughn, 2002). For students with E/BD, their lack of achievement, whether described as deficits in specific areas of knowledge; as deficits in skills; as cognitive deficits; as difficulties in attention; as an inability to engage successfully in learning; as a difficulty with thinking processes; or as difficulty with behaving in ways that facilitated learning; each contributed to poorer achievement and lower grades in school. Evidence for their lack of achievement was found in the U.S. based National Longitudinal Transition Study of Special Education. In this study, grade point averages of students with disabilities were compared with those of other groups of students. This study reported that students with E/BD received lower grade point averages than other students with disabilities, which, in turn, were below those of the general population (Wagner, 1995). This study found that students with E/BD had an average grade point of 1.7 on a 4-point scale, and in high school, a two thirds success rate on competency exams at their grade level and a one or more course failure rate of more than 75%. As a group, students with E/BD in the U.S were described as failing more courses more often than other students (Mattison & Felix, 1997), and in
comparison to other students with disabilities, they were grade retained more (Wagner). In short, in the U.S., students with E/BD had the worst outcomes of any group with disabilities during and after the school years (Blackorby & Wagner, 1996; Levy & Chard, 2001; Locke & Fuchs, 1995; Wagner).

The lower achievement of students described for students with E/BD occurred in all subject areas. Trout, Nordness et al. (2003) completed a comprehensive literature study on the academic status of students with E/BD over four decades from 1961 to 2000 and found that none of the studies reviewed reported that the students had performed above grade or age level, that 91% of the studies reported that students with E/BD were academically deficient, and that 89% of the reports found that they had academic deficits in reading, 92% found they had academic deficits in arithmetic, and the two studies located on written expression reported that they had academic deficits. A study by K. L. Lane, Barton-Arwood, Nelson, and Wehby (2008) also reported that 91% of the students in the studies were academically deficient. A study by Greenbaum et al. (1996) sampled children and youth with E/BD from 8-18 years old yearly who were served by either mental health or public school systems. They found that over 58% of the students were below grade level in reading and 93% were below grade level in mathematics. Although initially 53.8% of the children under age 18 with intelligence scores greater than or equal to 70 were reading below grade level, and 92.8% had below grade mathematics scores, by the end of the study seven years later, 85.1% were reading below grade level and 94.3% were below grade level in mathematics.

As reported earlier, the academic functioning of children aged 6-13 during psychiatric hospitalization was examined by Forness et al. (1987). This study found that the mean intelligence of the children on admission to the hospital was an average standard score of 93.7 with a range between 70 and 128 and that their reading and mathematics standard scores were, as a whole, about one year below grade level. When examined individually, 21% of the children were more than two years below grade level expectations and 13% were between one and two years below grade level in reading. These percentages were similar to the lags they exhibited in mathematics.

The lags in achievement noted for students with E/BD in elementary school were found to remain (Anderson et al., 2001; Greenbaum et al., 1996; K. L. Lane, Wehby, Little, & Cooley, 2005a, b; Levy & Chard, 2001; Mattison et al., 2002; Mooney et al., 2003; Reid et al., 2004; Trout, Nordness et al., 2003) or to increase over time, particularly for students with externalizing behaviours (Nelson et al., 2004). Behaviour in Kindergarten predicted school performance for students with behaviour issues in adolescence in that students who were anxious at school entry had higher grades in adolescence, whereas students with poor student-teacher relations in Kindergarten had poorer school performance 6 to 8 years later (DiLalla, Marcus, & Wright-Philips, 2004). In a study by Alexander, Entwisle, and Dauber (1993), the behaviour of Grade 1 students was also maintained and it influenced school performance through to Grade 4 both by enhancing or reducing learning and through the dynamics of teacher-student relationships. A study by A. D. Farmer and Bierman (2002) reported that students who were aggressive or withdrawn in Kindergarten were more likely to have poor grades, to experience peer relationship issues, and to have high levels of peer rejection later on in
school. They also received more special education services. Research found that students identified with E/BD did not necessarily begin their education with lowered achievement nor did their lowered achievement necessarily occur concurrently with the onset of their mental health disorders (Forness et al., 1983). According to Wodrich, Stobo, and Trca (1998) who used grades over time to note changes in academic performance for students with emotional problems, there was a time delay as much as several years from the onset of emotional problems to the deterioration of school performance to the point where services were sought and received by the student.

Youths whose mental health problems began in childhood as opposed to those whose problems emerged in adolescence also exhibited meaningful differences. In a study by McLeod and Fettes (2007), students who had exhibited significant externalizing or internalizing behaviours in elementary school and had received support services in elementary school were more likely to present with lower mathematics and reading scores. In contrast, those who had low levels of externalizing problems in childhood but high levels of behaviours in adolescence did not present with lower academic ability scores. In the study, children who had experienced high levels of problems at a young age had low rates of graduation even when their behaviours improved in adolescence and those who did manage to complete high school were less likely to enter college. Students who had high levels of internalizing problems in adolescence alone were just as likely to enter college, whereas those with externalizing problems in adolescence alone were significantly less likely to enrol in higher education.

### 2.3.16 The Challenges of High School

High school is associated with specific challenges for all students including those with E/BD. The transition to high school from elementary school or middle school with numerous schools feeding into a single school and the unfamiliar, larger, more anonymous, more complex school structure was found to be difficult for some students (V. E. Lee, Smith, Perry, & Smylie, 1999). In anticipation of transferring to high school, students, parents, and teachers were reported to have fears of students being bullied, getting lost, as well as from an increased workload and changed peer relationships (Zeedyk et al., 2003). Once in high school, the higher number of teachers may not have allowed the student to attach well to one individual, although high school may have allowed the student to have choice among teachers with whom to develop a relationship (Adelman & Taylor, 1998). In addition, the much higher academic demands of high school with increased expectations for independent learning and the changes in social environments meant that students who were less academic proficient struggled more. In high school, there was often less systematic monitoring and feedback by the school and home, concurrently with students having entering a system which provided them with more independence to complete academic assignments and maintain behaviour standards (Sinclair, Chrisstenson, Evelo, & Hurley, 1998). As well, in high school, students were expected to be skilled in cooperation so that classroom instructional time could be maximized (Beebe-Brankeberger, Frankenberger, Lane, Bocian, Gresham, & MacMillan, 2005). The effects of the transition to high school were assessed by
Seidman, Allen, Auber, Mitchell, and Feinmann (1994) who found that declines in students’ self-esteem, class preparation, and grade-point averages were common. In high school, students experienced more daily difficulties at the same time as they received less social support and were involved less in extracurricular activities. Positive effects included increased academic and social efficacy expectations after the transition as youths believed that they could master difficult academic and social encounters in the future. Each of these challenges associated with high school could be difficult for any students, but they may be particularly difficult for those with E/BD.

In high school, students with E/BD were also recognized to have difficulty working with peers. They were often found to be socially isolated and withdrawn because they did not feel safe emotionally to rely on peer relationships and they did not feel connected or as if they belonged with others in various environments (M. H. Epstein, et al., 1994). Highly anxious students were found to have avoided peer interactions or to have acted in a less competent manner, both in academics and in social activities because of perceived threats associated with social engagement and their inability to focus on the social cues required to engage (Barrett & Heubeck, 2000). As peer networks are microsystems in which students “interact with others, evaluate themselves, develop understandings of themselves and their world, and develop and modify their behaviours, beliefs, and values” (E. M. Z. Farmer & T. W. Farmer, 2000, p. 383), peer networks can positively influence students’ school success through classroom peer acceptance and number of classroom mutual friendships (Ladd & Burgess, 2001). Yet, as students with E/BD were often found to have fewer cognitive, social, and emotional skills, and to have difficulty developing the social skills to get along well with peers at school, they were found to be rejected both socially and academically by peers (Barker et al., 2007; Foels, 2007; Lacourse et al., 2006; Ladd & Troop-Gordon, 2003; Séguin, Arseneault, Boulcerie, Harden, & Tremblay, 2002). Although social integration with peers may be desired for students with E/BD, in a study of 14 young adults aged 18-26 with E/BD, Foels (2007) found that the friendships these individuals had with individuals not similarly identified were often ones they had established in childhood before they were identified as students with special needs. This may have been because their behaviours did not help them foster self-esteem or provide them with opportunities to build positive relationships and connectedness with others (M. H. Epstein et al., 1994). Instead, students with E/BD were sometimes aggressive to peers or were victimized by their peers. If they were victimized, they may have avoided school. In evidence, a number of studies found that students who were victimized early in the school year were more likely to avoid school as the year progressed (Ladd & Burgess, 2001; Ladd, Kochenderfer, & Coleman, 1997; Ladd & Toope-Gordon, 2003). Their actions may also have caused both teachers and peers to have avoided engaging with them, which further reduced their learning opportunities (Huesmann et al., 1987).

Roeser, Eccles, and Fredman-Doan (1999) examined patterns of academic functioning in Grade 8 students prior to them transitioning to high school and in Grade 9 after they had transitioned. They found that some students had found the move into a larger more bureaucratic and perhaps less personal place with different friends difficult, but overall, no significant changes in students’ mental health were found. Students
identified with multiple mental health problems were found to improve in high school and they did not have declines in self-esteem or achievement during the transition, however, they were truant from school more and were more involved in community problem behaviours. Roeber et al. suggested that students with multiple problems may have turned to their alienated peers to achieve self-esteem and emotional well-being, thereby becoming engaged in antisocial activities. Roeber et al. also noted that the declines in achievement and motivation to do well in school were more significant during late elementary to late middle school and that these students were already on a trajectory towards academic failure before they transitioned to high school. As students with E/BD may be less skilled academically than their peers, high school may be more difficult academically for them. Teachers of students with E/BD aged 12 to 17 identified them as having problems in: written expression; reference skills (e.g., library); reading skills and performance; listening and note-taking skills; test-taking skills; skills for planning and managing study materials and time; mathematics skills and performance; general education knowledge; skill in studying information effectively; oral expression; completing independent work; as well as having less interest, less motivation, and a poorer attitude to tasks (Sabornie, Cullinan, & Epstein, 1993).

2.3.17 Where and How Students with E/BD are Taught

In BC, most students are taught in regular classes in regular schools. The province clearly embraces the UNESCO challenge to “educate all children together for their mutual benefit” and the BC Ministry of Education Special Education Policy states, “all students should have equitable access to learning, opportunities for achievement, and the pursuit of excellence in all aspects of their educational programs” (BC MoE website, 2006). Although the BC Ministry of Education states that students with special needs are to be placed “in the most enabling learning environment” (BC MoE, Special Education website), where schools in BC teach students with E/BD is not prescribed. The number of students with E/BD in BC who are placed in alternate settings such as alternate education classrooms and alternate schools is not reported. In reality, as students with E/BD are difficult to integrate into regular classes, many are educated in these alternate settings to enable them to be successful.

In the U.S., as well, there has been a trend towards educating students with E/BD in more inclusive settings. In the U.S., in 2001, less than 16% of all students with E/BD were educated in regular education classes (Reddy, 2001). Of students with E/BD, those with greater levels of anxiety and social withdrawal were integrated less often (Sabornie et al., 1993). In 2006, Wagner et al. (2006) noted that 7 out of 10 students classified with E/BD attended general education schools in their neighbourhoods, with no significant differences amongst grades, and from 85.4% to 92.3% of students with E/BD spent at least part of their day in general education classes, however, those in the elementary grades were less likely to go to neighbourhood schools than their peers with other disabilities.

Where, what and how students with E/BD are best taught has been controversial (M. H. Epstein et al., 1993) and opinions on best placement for their success differ.
Proponents of alternate education have often argued that students with E/BD required many years of failure before they were acknowledged as needing more restrictive environments and placements, although there was agreement that the placements in and of themselves were not a substitute for effective interventions (Faris-Cole, 2002). Although many students with E/BD are taught in alternate settings, it is important to recognize that before receiving these placements, most spent years in integrated classrooms before their special needs were formally identified. A study by Malmgren and Meisel (2002) provided a descriptive analysis of secondary students served by special education, juvenile justice, and child welfare. This study found that the average age of formal identification by one of the agencies was 8.4 years but that identification for special education services had happened at an average age of 10.2 years and the average age females received services was significantly older than for males. Prior to referral for special education services, 48.8% of the students had experienced difficulties or delays in multiple academic areas that were documented by the school system, 91.7% had presented with conduct problems in school, 35.2% had been grade retained (more than half in elementary school), and a quarter had been suspended from school at least once. Although 3.6% of the students had chronic school attendance problems prior to their referral to special education, and 38.9% had attended more than one school in an academic year, after referral, 63.0% had chronic school attendance and 71.7% had attended more than one school in an academic year.

2.3.18 Positive and Negative Aspects of Alternate Placements

Some positive aspects of alternative education placements for students with E/BD were described in the literature. They included improved student attendance, grades, and behaviour in the alternate settings, although these improvements were not sustained when these students subsequently returned to regular classes in regular schools, a finding which was attributed to the lack of onsite social services, the removal from smaller classes, and the absence of counselling teachers in integrated placements in regular schools (Carpenter-Aeby & Aeby, 2001). It may also be that when students with E/BD were transferred into alternate settings they differentiated their new experience from their integrated classroom experience, and when they then had a positive experience in the alternate setting, they became enthusiastically involved in activities that motivated them to grow and thrive in that setting (Foels, 2007).

Negative aspects of alternate settings for students with E/BD were also described in the literature. Faris-Cole (2002) noted a number of difficulties. Alternate settings were sometimes recognized for a lack of structure and low classroom behaviour management. If there was little direct teaching in the alternate settings, the students may not have learned missed skills. If oral techniques were used, students trying to complete seatwork elsewhere in the setting may have been distracted. Students may not have received truly individualized instruction but were placed into established programs with repetitive exposure to the same material and they did not receive any teaching on how to learn and study. Additional problems with alternate settings were identified by others. In the alternate settings, the teachers were disproportionately male;
more diverse; significantly younger (m = 42 years old); had taught significantly fewer years than other teachers of special needs students; felt less prepared to meet the needs of students from different cultural and linguistic backgrounds or in using technology (B. S. Billingsley, Fall, & Williams, 2006). Suggested was that their lack of experience and training in teaching students with E/BD may have hampered their delivery of effective instruction for these students. Often few accommodations were provided and the curriculum in alternate settings was sometimes found to be irrelevant (Jones, 2002) or it was set for the student without collaboration with the student and without appropriate adaptations or differentiation (Rice, 2003). In alternate settings, the most common accommodation provided was simply additional time to complete assignments (57.3%) and to take tests (72%) (R. Bradley et al., 2004). Often accommodations were planned and implemented without the involvement of classroom teachers (Adelman & Taylor, 1998; L. Taylor & Adelman, 2000) which, according to L. Taylor and Adelman, created “probably the most serious form of fragmentation” (p. 2). In alternate settings, students with E/BD were more likely to be placed in low ability tracks which resulted in cumulative performance loses relative to expected performance, more school dropout, and less readiness for the job market (E. M. Z. Farmer, 1995).

The grading in some alternate programs was criticized for being the same for all students based on factors such as attitude, class participation, performance on daily class work, homework, and tests, which did not take into consideration that each student’s disability is not the same and their level of disability is not the same. In alternate settings, there was sometimes a lack of provision of career and vocational training and no transition plan in place. Sometimes there was a lack of specific support for the student’s mental health issues, which needed to be addressed in order for the student to learn, and sometimes there was a lack of support in the program for crises (Badesha 2002). The alternate programs were also criticized for concentrating on external discipline and for emphasizing “maintaining silence and order in the classroom, over increasing the students’ academic skills” (Jones, 2002, p. 36).

2.3.19 Positive and Negative Aspects of Inclusive Placements

Some positive aspects of inclusive placements for students with E/BD were described in the literature. The three meta-analyses completed by E. Baker, Wang, and Walberg (1994-2005) established that students with special needs educated in regular classes did better academically and socially than comparable students in non-inclusive settings. In inclusive settings, students were alone less often, had more social contact, more social acceptance, greater social networks, and, as a result, had greater social gains than students in special classes. Foels (2007) suggested that instead of placing students with E/BD in distant settings such as portables, they needed to be programmed into classrooms with ample space, and within the general education population of the school, in order to provide them with an opportunity to interact with their non-disabled peers as they moved from class to class as well as to provide them with an opportunity to increase their physical movement and the experience and practice of “getting from one place to another and following directions so they can become independent” (p. 175).
The literature also clearly established the plethora of difficulties associated with integrating students with E/BD into regular classes in regular schools. The described difficulties were widespread and significant. The first reason that students with E/BD were difficult to maintain in inclusive classes was because of their behaviours as in all settings the physical and psychological safety of other students had to be ensured. Kauffman et al. (1995) reminded that these students

\textit{may be severely antisocial, aggressive, and disruptive, they may be socially rejected, isolated, withdrawn, and nonresponsive; they may show signs of severe anxiety or depression or exhibit psychotic behaviour; they may vacillate between extremes of withdrawal and aggression; and they nearly always have serious academic problems in addition to their social and emotional difficulties} (p. 336).

The specific behaviours of students with E/BD in integrated classrooms were described by Sabornie et al. (1993). From most evident to least evident, teachers rated students with E/BD aged 12 to nearly 18 as: verbally abusing or threatening people; being disrespectful or defiant of authority; using physical aggression, being disruptive, loud or rowdy; angering easily; having an explosive temper; using obscene profane or sexually oriented language; destroying and ruining things; responding inappropriately to correction or criticism; not considering the consequences of their own acts; cheating, lying and stealing; not following instructions or rules; being with companions who often get into trouble; using drugs and/or alcohol; and, being inappropriately active or fidgety. Personal factors mentioned in order of loading included: having few or no friends; being rejected, being avoided by peers; being sad much of the time; lacking skills to be friendly and sociable; being anxious, worried and tense; trying to avoid interacting with people, being overly sensitive with feelings and emotions; having feelings of worthlessness and failure; not working well in group activities; performing repetitive or ritualistic behaviours; not being flexible when faced with new tasks or conditions; and talking about suicide or own death.

The experiences of students with E/BD in integrated classes were also problematic. Even if youth with E/BD were placed in favourable or privileged academic settings, they were less likely to benefit from these settings than students without behaviour problems (M. Z. Farmer, 1993). When in integrated classrooms, students with E/BD participated less and responded orally to questions less than their peers (Mooney et al., 2003), worked with peers less often than did their peers (Wagner et al., 2006), and attended more to social cues than to academic learning cues (Huesmann et al., 1987). As a result, they were frequently off task; had trouble engaging in academic tasks; did not follow classroom or assignment rules; disrupted their classes; and they lost instructional time for both themselves and others (Ladd & Burgess, 2001; Wallach, 1994). Their trouble controlling their negative emotions resulted in them not adjusting as well in school and therefore not performing as well (Raver, 2002). If these students became angry concurrently with new classroom skills being taught, they were often
removed from the classroom and they faced expulsion, thereby missing coursework which further contributed to their lack of success in class (Birnbaum et al., 2003). As they were removed from the classroom more often than other students, they often had gaps in their learning or faulty understanding from having learned information independent of the classroom.

Often students with E/BD had difficulty completing the tasks being asked of them. For instance, in a study by Carr, Taylor, and Robinson (1991), preschool children students with severe behaviour problems misbehaved 46.8% of the time in work situations when they were receiving instructions, whereas they misbehaved only 0.5% of the time when the instructor was engaged in noninstructional behaviour with them. This suggested that the general instructions or specific tasks asked of children in classroom settings may have exacerbated their negative behaviours. It may be that the misbehaviour of students with E/BD is a way of countercontrolling adults (Carey & Burbon, 2006). In response to the negative behaviour of the students, the teacher then acted in particular ways with them. For instance, findings from Carr et al. indicated that teachers engaged in teaching activities less often with these students. Carr et al. also found that when teachers did work with these students, they limited their instructions and used more techniques that were associated with lower rates of problem behaviours and when these students subsequently misbehaved in response to receiving instructions or being given specific tasks, teachers did not give the undesirable tasks to them (Carr et al.). As a result of the students’ behaviours, their teachers had difficulty implementing instruction and they therefore may not have been provided with high quality instruction; thus, as a result, they may have shaped teachers into providing them with less instruction (Carr et al.; Wehby, Lane, & Falk, 2003; Wehby, Symons et al., 1998).

Sometimes the interactions that students with E/BD had with teachers were problematic because of teachers’ actions and reactions. In evidence, students with behaviour challenges and academic deficits frequently experienced negative or punitive interactions with their teachers no matter how they behaved in class (Gunter, Jack et al., 1994; Gunter, Shores et al., 1994). When students who were aggressive did perform well in class, the teacher’s negative attitude sometimes resulted in their performance not being reinforced (Huesmann et al., 1987). In a study that monitored interactions with students with problematic behaviour, Gunter, Jack et al. found that students who were aggressive or disruptive were involved in positive interactions which involved praise or positive consequences and no negative behaviours with their teachers only 3% of the time; as well, they seldom received positive consequences such as praise or positive physical contact even when they engaged in appropriate behaviour and complied with teacher requests. Students’ troubles with teachers and their lack of school enjoyment also predicted poor grades (Milsom & Glanville, 2009).

When students had conflictual relationships with their teachers, they sometimes became angry, resentful, or anxious, and, as a result, they may not have adjusted as well in the classroom (Ladd & Burgess, 2001). For instance, conflictual relationships between Kindergarten students and their teachers were correlated with lower levels of school liking, less classroom participation, more school avoidance; and when these conflicts became chronic, trajectories towards scholastic dysfunction were developed
with increased student attention problems and reduced achievement (Birch & Ladd, 1997; Ladd & Burgess). In a study of the relationships between Kindergarten students and their teachers, Vitaro et al. (2005) found that the negative relationships between students and their teachers predicted poorer school outcomes later in elementary and middle school, however, the teachers' management styles did not predict high school graduation and did not interact with children's disruptive behaviour. For students with significant externalizing or internalizing behaviour problems, the closer they were to their teacher, the more positive was their adaptation whereas the more conflict they had with their teacher, the more negative was their school adaptation (J. A. Baker, Grant, & Morlock, 2008).

Teachers' responses to the negative behaviour of students were described to influence students' academic achievement, their grades earned, and the teacher's responses to the work they completed (Brophy, 1983; Reddy, 2001). When teachers responded negatively to students, the students may have withdrawn further and may have placed themselves into environments that were impersonal that did not support their achievement (McLeod & Kaiser, 2004). Teachers' attitudes towards students were also found to influence teachers' ratings of them. In evidence, students with E/BD were rated by classroom teachers as lower than other students with special needs in completing homework on time, in taking part in group discussions, and in staying focussed, whereas ratings of these same students from special education teachers or work experience programs were much higher, suggesting that teachers' perceptions may have influenced the low grades and high failure rates these students experienced (Wagner, 1995). The education programs provided for students with E/BD may not have adequately addressing the needs of students with E/BD, yet, according to Ryan (1976), teachers have blamed students with E/BD who needed help rather than developing appropriate programs for them. Labelled “victim blaming” by Ryan, this blame is said to emanate “far below the level of sharp consciousness and…is arrived at subconsciously as a compromise that apparently satisfies both…self-interest and…charitable concern” (p. 27). Ryan concluded that those who engaged in victim blaming were, for the most part, “good people” who supported “almost anything that involves changing or manipulating or treating the child” (p. 36). As a result, the educational context, over which educators had influence and control, was simply not addressed, or was very rarely addressed. When a child was not learning or was failing at school, the failures of the educational system were usually not examined (Knapp, 1995; Ryan, 1976). Instead, teachers examined only the child whose behaviours were discrepant from the behaviours desired by the teacher.

Regarded as more difficult to teach than students with other problems or disabilities, students with E/BD have often been recommended for removal from general education classes (Gunter & Denny, 1998). They have frequently been suspended, expelled or transferred involuntarily from school and they have had higher rates of school-initiated transfer placements into more restrictive settings than other students with disabilities (R. Bradley, Henderson, & Monfore, 2004; Leone, Mayer, Malmgren, & Meisel, 2000; Mendez, Knoff, & Ferron, 2002). When removed, the students did not develop academically and they experienced more negative interactions with peers
including rejection and teasing. If these students were subsequently transferred to other teachers or were pulled out of classrooms, their negative behaviours and interactions often continued in the new settings, they were once again stigmatized, and the next classrooms were disrupted. When they were sent to the office or suspended, they missed academic instruction and when they were placed in segregated settings, they did not have the opportunity to interact with nondisabled peers and develop skills for regular settings. If these students were suspended, they may not have been supervised at home but instead, spent time socializing with peers who were also out of school. If these students were transferred to other schools, their peer relationships at their home school became disrupted and they became further disconnect from school. Throughout the process, if they were dealt with disrespectfully by peers, teachers, and others in the education system, they may have disconnected further from school.

2.3.20 Dropping out of School

Although most students without E/BD graduate from high school, most students with E/BD drop out of high school. In Canada, in 2000, 75.8% of youth between ages 18-20 graduated from high school and approximately 11.4% dropped out of school (Bowlby & McMullen, 2002). Of those who had graduated, 12.8% had attended higher education. In 2004-05, in Canada, 14% of males and 9% of females had not finished high school by the time they were 20-24 years old (Raymond, 2008). In BC, for the 2007-08 school year, 75% of all students had graduated from high school within six years of entering Grade 8 (BC MoE, 2010). Yet, for the 2007-08 school year in BC, only 30% of students identified with E/BD graduated from the five year high school program within six years of entering Grade 8 (BC MoE website). This completion rate is compared to the 83% of students without special needs who graduated from the five year high school program in the province within six years of entering Grade 8 (BC Ministry of Education, website). The adjusted rate of graduation for students in the 2004/05 cohort reported that approximately 5% of the students identified with E/BD who did not graduate from the Kindergarten to Grade 12 system graduated with an Adult Graduation Diploma, thus completing their five-year graduation program within eight years.

As so many students with E/BD drop out of school, the literature describing students who have dropped out of school has applicability for students with E/BD. Students who dropped out of school were more often male than female (Alexander et al., 1997; Ensminger & Slusarcick, 1992; Rumberger, 1987), had higher levels of drug or alcohol use than their peers (Garnier, Stein, & Jacobs, 1997; Janosz, Archembalut, Morizot, & Pagani, 2008; Martin et al., 2002), and were likely to work more than 15 hours a week (Martin et al.). In comparison to their peers, they tended to have lower intelligence levels (Jimerson, Egeland, Sroufe, & Carlson, 2000); lower achievement levels (Hymel & Ford, 2003; Janosz, LeBlanc Boulerice, & Tremblay, 1997; Garnier et al., 1997); lower test scores, lower grades, and they failed classes and grades more often than their peers, ending up not having enough credits to graduate (Alexander, et al., 1997; Bowlby & McMullen, 2002; Martin, et al., 2002; Sinclair, et al., 1998). They
also tended to have lower than average self esteem; more difficulties with teacher and peer relationships; more frequent discipline referrals (Martin et al., 2002); fewer friends, and they did not feel equal to their peers (Bowlby & McMullen, 2002; Gregory & Weinstein, 2004; Sinclair et al., 1998). They often felt peer pressure to not achieve or to leave school (Martin et al., 2002). In a study by Hymel and Ford (2003), 88.6% of students who graduated from school reported having good relationships with their teachers, whereas only 60% of the students who dropped out of school had these good relationships. Although most students who both failed and succeeded at school had experienced a teacher who was significant to them once (91%), or twice (82%), only 25% of students who failed at school compared to 50% of those who succeeded saw a teacher as a role model, and only 12% of those who failed perceived a teacher as having been helpful to them to solve their school or personal problems (Gregory & Weinstein).

Research found that students who dropped out of school had lower levels of school engagement at high school entry (Janosz et al., 2008) and were more aggressive early on in school (Ensminger & Slusarcick, 1992). They had further disengaged from school over time (Alexander et al., 1997); had poor educational aspirations; had more negative reactions to school (Astone & McLanahan, 1991); had lower levels of commitment to school (Janosz et al., 1997); and they were absent from school more often than other students (Malmgrem & Meisel, 2002; Sinclair et al., 1998; Wagner, 1991). They had not adjusted well to the school setting as they did not "fit in" (Martin et al., 2002). Reasons they gave for dropping out of school included: feeling that they were outcasts, feeling that they were rejected at school, associating with friends outside the mainstream, and having home situations that were problematic (Rohrman, 1993).

Students who dropped out of school had some family and school characteristics associated with them. They were more likely to come from low socioeconomic status families that were larger (Ensminger & Slusarcick, 1992). Their families tended to have other dropouts in them, and their homes were typically headed by younger mothers who had lower levels of education (Alexander, Entwisle, & Horsey, 1997; Astone & McLanahan, 1991; Ensminger & Slusarcick; Janosz et al., 2008; McLeod & Fettes, 2007; Jimerson et al., 2000). Their families had experienced disruptive family changes more frequently (Alexander, Entwisle, & Horsey), were more mobile (D. Osher et al., 2003), and had more family stress and/or dysfunctionality (Garnier et al., 1997; Martin et al., 2002). Often their families had not provided them with quality early caregiving (Jimerson et al.), were less involved or demanding of them, provided them with less educational support (Ensminger & Slusarcick; Martin et al.), supervised them less, and had adopted a more permissive parenting style with them (Bowlby & McMullen, 2002). School factors associated with school dropout included: attending three or more high schools, not fitting into the high school setting, feeling rejected (Martin, et al.; Rohrman, 1993), and being an "at risk" student in a high school with stringent discipline (Way, 2003). A positive correlating factor related to lower dropout was attending a school of fewer than 500 students (Wagner, 1991).

The trajectory towards dropping out of school started early on (Jimmerson et al., 2000). On average, students who eventually dropped out of school had lower ability
prior to school entry and lower levels of early school performance (Garnier et al., 1997). They more commonly exhibited aggressive behaviours in their early grades although when family members had supported boys who had been aggressive in Grade 1 through homework help and high expectations for future education, these boys were twice as likely to graduate from high school (Ensiminger & Slusarick, 1992). A study by McLeod and Kaiser (2004) found that having either internalizing or externalizing problems between ages 6 and 8 significantly increased the probability of dropping out of high school whereas self-reported depression in high school alone did not. In a study of anxious students in Kindergarten to Grade 6, students’ anxiety tended to fluctuate in the elementary grades and being anxious predicted high school noncompletion by age 20 (Duchesne, Vitaro, Larose, & Tremblay, 2008), although Vitaro et al. (2005) found that anxiety in Kindergarten did not predict whether a student would complete high school when gender, family adversity, and disruptiveness were factored out. A study by Alexander et al. (1997) reported that child care arrangements and parental attitudes towards parenting over the summer between Grades 1 and 2 as well as poor attendance in Grade 1 predicted future dropout as those who eventually dropped out had changed schools more frequently in Grade 1, had changed caregivers for the summer between Grade 1 and 2, and averaged 16 days absence in Grade 1, whereas those who graduated averaged 10 days absence in Grade 1. Midway markers of dropping out were being rejected by peers, having behaviour problems, and having other problems with school including having low marks and repeating a grade (Jimerson et al., 2000; McLeod & Kaiser, 2004). Jimmerson et al. noted that problem behaviours in Grade 6 were the best predictor of eventual dropping out of school. Others noted that by Grade 7, students who eventually dropped out had more personal, social, and family problems (Garnier et al., 1997; Janosz et al., 1997; Janosz et al., 2008).

In the U.S. based studies, youth with E/BD were significantly less likely to graduate from high school (Coutinho & Denny, 1996). In fact, one longitudinal study noted that over half of the adolescents in the U.S. who failed to complete high school had a diagnosable psychiatric disorder (Stoep et al., 2003). In that country, students with E/BD dropped out of high school at a higher rate and earlier than their non-disabled peers (Marder, 1992; Quinn, Rutherford, Leone, Osher, & Poirier, 2005), and at a higher rate than students in any other disability category (Marder & D’Amico, 1992; Stodden et al., 2000; Wagner, 1991). Nelson et al. (2004) reported that only 42% of students with E/BD graduated with a high school diploma. Vander-Stoep, Weiss, Kuo, Cheney, and Cohen (2003) noted that 48% of students with E/BD had dropped out of high school, which was higher than the 30% of students with disabilities and 24% of all high school students who had dropped out before graduating. Wagner (1991; 1995) interviewed approximately 8000 youth ages 13 to 21 who had been enrolled in special education previously and noted that dropping out of school was the culmination of school performance problems including high absenteeism and poor grade performance. At the time of drop out, these students had earned fewer than half the average number of credits of students who graduated and had missed an average of 18 days of school a year. Students with E/BD were the least likely to belong to clubs or social groups at
school. Those who saw friends outside of school 4-5 days a week were estimated to be absent more.

McLeod and Fettes (2007) examined mental health trajectories to school failure. They found that students with internalizing problems who dropped out of school were more likely to have been poor and to have a delinquent mother. Individuals with high levels of internalizing problems in childhood were more than twice as likely to not complete high school as opposed to those with moderate or low levels of internalizing behaviours. Having high levels of externalizing problems at any time during childhood and adolescence was found to result in students being significantly less likely to complete high school and to enter college. Youths who had low levels of externalizing problems in childhood but high levels in adolescence were only 34.0% as likely to complete high school as youths with stable low levels of problems. For both students with internalizing and externalizing problems, the timing of their problems was inconsequential when predicting high school completion. Needham (2009) used the U.S. National Longitudinal Study of Adolescent Health data to measure the school completion rates and college entry rates of over 14000 adolescents with symptoms of depression. They found that depressive symptoms during adolescence were associated with increased odds of high school dropout for females but not for males. Kessler, Foster, Saunders, and Stang (1995) reported that students with early onset mood disorders were significantly more likely to graduate than either females with anxiety or conduct disorders, or males with conduct disorders. Kortering, Braziel, & Tompkins (2002) interviewed high school students with E/BD in order to identify factors that may have affected their high school completion. Issues they identified that contributed to their dropping out of school included: poverty, grade retention, arrests, below average intelligence, as well as low achievement scores in reading, math, and written language. These students considered the best parts of school for them to be particular classes, generally those with substantial student activity or classes in which they experienced success or could socialize with peers. The worst parts of high school for them were specific classes, teachers, or administrators. The ideas they had for changing the school system included: being placed in regular classes or practical or interesting classes rather than special education classes, receiving more support, having problematic rules changed, having more support from family, having family problems solved, having personal changes such as behavioural changes, enjoying school more, and, staying in school longer. When asked how a teacher had helped them, they mentioned teachers who took time for them, talked individually with them, worked with them, made the class fun, encouraged them, were nice, and helped them learn in various ways.

A study by Mattison et al. (1998) described trajectories towards school completion versus noncompletion for students in elementary and secondary school who were newly identified with E/BD in order to identify variables that differentiated the group of successful students from the group of unsuccessful students, as well as to predict membership in the two outcome groups. The study found that verbal intelligence scores were lower than performance scores in both groups by 11 or more points. The mean reading score of the successful group was 92.4 whereas the mean reading score for the
unsuccessful group was 88.3. Almost 50% of the unsuccessful group had a reading disorder according to at least one definition. No significant differences were found for those with ADHD; however conduct or oppositional disorder was significantly more common in the unsuccessful outcome group. A majority of students in both the successful and unsuccessful groups were no longer living with natural parents, had experienced abuse, and over three quarters had a natural parent with a psychiatric illness as well as mothers without a high school education.

In a review of evidence-based secondary transition practices to enhance graduation rates for students with disabilities, Test, Fowler, White, Richter, and Walker (2009) aligned interventions, predictor variables or descriptions of practices with a taxonomy described by Kohler and Field (2003). Recommended practices were:

- Student-focused planning: using assessment information and facilitating student involvement in their own educational planning based on their post-school goal including practices such as student participation in the development of individual education plans;
- Student development: encouraging life, employment and occupational skills; providing school, and work-based instruction with a focus on self-determination; helping with goal setting and attainment; developing problem solving skills; developing leisure skills; developing employment skills instruction including employability skills; providing specific programming and on-the-job training; developing independent living skills; and providing a “helpful class” and a “helpful person” to help them prepare for adult life;
- Interagency collaboration: emphasizing involvement of various participants through the use of interagency agreements, including working with community businesses so that the curriculum will be relevant to post-school employment; coordinating and integrating academic and vocational services for them;
- Family involvement: planning with parents and families; facilitating family involvement in transition planning and transition-focused-education through training and empowerment; and
- Program structure: providing flexible schedules, alternatives to suspensions, needed supports, and the attainment of credit.

Of significance is that this study did not find any articles or research that focused on academic intervention strategies for students that would enhance their graduation rates.

2.3.21 Conclusion to the Literature Chapter

Many factors were found to influence the grade-to-grade transition and graduation of high school students with E/BD and much research applied to students with specific kinds of E/BD, at specific ages in specific circumstances. It is also clear that some threads wended through many contexts and emerged more dominantly. These included the entwined nature of E/BD with learning; the significant influence of parent factors such as socioeconomic influences and parent involvement in education; the learning difficulties experienced by students with E/BD, and the difficulty in teaching students identified with E/BD.
3: METHODOLOGY

3.1.1 Introduction

This study used a mixed methods case study methodology to construct an identity of the students identified with E/BD in the Sunnyville School District on May 30, 2008, in BC, Canada so that factors associated with the successful grade-to-grade transition and graduation of high school students with E/BD in the Sunnyville School District could be determined. The cases of the 384 students designated as special education students for BC Ministry of Education purposes with “Behavioural Needs or Mental Illness” at the two levels of severity, “Students Requiring Moderate Behaviour Support or Mental Illness” and “Students Requiring Intensive Behaviour Interventions or Serious Mental Illness,” were constructed to create the identity of students with “Behavioural Needs or Mental Illness” in the district. Following this, for the 229 students identified with “Behavioural Needs or Mental Illness” in Grades 8-12, the students who had successfully completed their four core subjects (English, a social studies course, a mathematics course, and a science course) were compared with those who had not passed each of these courses during the school year by June 30, 2008 or had not graduated by this date, in order to establish some factors associated with successful grade-to-grade transition and graduation of students identified with E/BD. In this way the problem situation of why so few high school students identified with E/BD in the district were successfully grade-to-grade transitioning in Grades 8-12 and graduating from high school in BC with a “Dogwood” Certificate of Graduation within 6 years of their entry to high school in Grade 8 could be addressed. As well, suggestions could be made to improve the high school graduation rate of students identified with “Behavioural Needs or Mental Illness”. This chapter describes the case study research methodology chosen for the study and how it was implemented. It also provides a description of the information collected, the research context, and procedures utilized in the study.

3.1.2 Case Study

Case study methodology was chosen for this study. It is a research methodology defined as a systematic inquiry into a contemporary event or a set of related events, which aims to describe and explain this phenomenon of interest, especially when the boundaries between the phenomenon and context are not evident (Bromley, 1990; Yin, 2003a, b). The phenomenon of interest can be a “process, event, person or other item

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10 Sunnyville is a pseudonym for the school district and area utilized for this study.
of interest to the researcher” (Gall, Gall, & Borg, 2007, p. 447). A case study approach was chosen for this study because the problem that perplexed, which was why so few students with E/BD were successfully grade-to-grade transitioning in Grades 8-12 or graduating from high school with a BC “Dogwood” Certificate of Graduation in the province, and what school districts could do to improve the graduation rates needed to be understood in the context of one school district in one locale so that information generated could be understood without confounding factors from context differences making the findings less meaningful. This methodology also allowed an entire population to be reviewed to develop an identity of the population and to identify factors associated with successful grade-to-grade transition so that individual, family and community factors associated with their successful grade-to-grade transition could be developed. By completing case studies of all students, the difficulty of attaining statistical significance for factors that emerged in the study that were possibly significant but were not associated with many students could be avoided. Also, by examining the phenomenon of interest, the grade-to-grade transition and graduation of high school students identified as special education students with “Behavioural Needs or Mental Illness” in an in depth way, the richness of the data in the files could be mined so that an explanation of factors associated with school success for this population could be established. The richness of information available from the file reviews was needed as there was little prior information available from the selected district or elsewhere in BC or Canada about factors related to the successful grade-to-grade transition of this population in high school.

The choice of case study methodology does not imply that the research is either qualitative or quantitative or that it includes both, nor does it imply the use of any particular data collection method (Yin, 1981). Instead, the case or cases to be studied, the type of study chosen, the phenomena to be examined, and the questions to be asked, determined the evidence to be gathered. The case study approach can provide detailed descriptions of the phenomenon, develop possible explanations for it, or evaluate the phenomenon itself (Yin, 2003a, b). Case study is an approach chosen when the researcher has an interest in the case, when the case is used to understand more than what is obvious to the observer, or when a group of cases is studied (Stake, 1995). Use of case study methodology adds strength to previous research (Dooley, 2002) and it can be used to develop expertise, as it contextualizes knowledge from the examination of multiple situations. Case study allows a more flexible representation of knowledge to be gained in a way most relevant to the phenomenon of interest (Brandsford, Brown, & Cocking, Eds., 2000). In this study, the phenomenon of interest was known and the detailed information about the cases studied was used to describe and explain the phenomenon so that comparisons could be made with studies and information reported from elsewhere. A comparison with existing research was important as most research about students with E/BD was from the U.S, so it was not known if or how findings from the Sunnyville School District would be similar or different. By using case study methodology, the findings could be comprehensively described and compared. As well, recommendations for intervention and further research could be developed.
The choice of case study methodology allows the researcher to probe a particular question or phenomenon in detail to create a holistic, multidimensional understanding, somewhat like creating an integrated portrait or a quilt of many pieces (Orum, 2004). Case study is conceptualized in this study as emanating from the bricoleur tradition (Denzin & Lincoln, 2005). In this tradition, the limitations of a single method are recognized and so, as a research bricoleur, the researcher “pick(s) up the pieces of what’s left and pastes them together as best they can” (Kincheloe, 2005, p. 681). Within this tradition is placed the metaphor of the quilt maker who, as a bricoleur, interprets by piecing together “the odds and ends, the bits left over” (Harper, 1987, p. 74). This methodology tinkers with what exists, creating order out of information that has been around, in order to put the pieces together into an effective design of the researcher’s choosing (Flannery, 2001). Case study is particularly fitting for this study because, as a methodology that allows the researcher to take whatever exists, it is not stymied by a lack of availability of certain documents or a lack of permission to access existing documents. In this study, the contents of the files as well as other information available from the support services office in the selected school district were made available to the researcher. What the files contained could not be assured beforehand, and, in the end, the contents of the files determined the categories for data collection, and whether particular data would be qualitatively or quantitatively utilized.

3.1.3 Case Selection

A unique characteristic of case study research is “the ability of the researcher to use the observations of a single unit or subject, or contextual case, as the focal point of a study, along with its plurality as a research method” (Dooley, 2002). Although case study can involve a single case in which an in depth picture of it is attained. It can also involve multiple case studies to provide detailed descriptions (Cresswell, 1998; Stake, 1995). In case study, “each case is a concentrated inquiry into a single case” (Stake, 2005), or cases may be explored simultaneously, as “when there is even less interest in a particular case, a number of cases may be studied jointly in order to investigate a phenomenon, population or general condition” (Stake, 2005, p. 445). Whereas single case studies are difficult to generalize, multiple case studies can have an abundance of variables. Case studies that are multiple-case designs must follow a replication rather than sampling logic (Tellis, 1997). By choosing a multiple case design, the results are strengthened because of replication of the pattern-matching, thus increasing confidence in the robustness of the results (Yin, 2003b). Multiple case studies facilitate a cross-case search for patterns in addition to within-case analysis (Eisenhardt, 1989). This study utilized a multiple case study design with both within-case and cross-case analysis. Each student’s file was examined separately and data that could be pattern matched was then compared across cases. For this study, the cases were both individually and simultaneously examined to establish patterns to explain the phenomenon of interest.

The selection of cases can be bounded by time, space, events, or people, which represent the phenomenon of interest as best as is possible to maximize learning in
order to seek balance and variety (Stake, 1995). The cases for this study were chosen from one district in BC so that the area, school district, and intervention models, as well as contextual factors from the schools and community would be similar. This study was also bounded by examining the cases of students who were designated with “Behavioural Needs or Mental Illness” at the two levels of severity, “Students Requiring Moderate Behaviour Support or Mental Illness” and “Students Requiring Intensive Behaviour Interventions or Serious Mental Illness” based on identification as documented on a specific date and by using information held at the district’s support services office. This bounding of the study precluded a disparate and unbalanced selection of sources being amassed about the subjects, a practice that could possibly skew findings by what was collected, from where, about whom, as the variant forms of behaviour and mental illness as well as their presentation in individuals could weaken the validity of the findings.

3.1.4 Research Context: Sunnyville

The Sunnyville School District is located in British Columbia (BC), Canada. The Sunnyville area is both urban and rural. The school district covers a catchment area that reported a population of approximately 85,000 in the 2006 census with 23% of the population being between 0 to 17 years old (Statistics Canada, 2006). At the time of this study, the Sunnyville School District consisted of 22 elementary schools that served students from Kindergarten to Grade 7, 6 secondary schools that served students in Grades 8-12, and 2 alternate schools, one of which served students from Grades 8 to 12, and the other of which served students from Grades 10 to 12. Whereas each of the elementary schools and the 6 secondary schools were inclusive in nature, and served the neighbourhoods as well as students who chose to cross-boundary transfer to attend the schools, the 2 alternative secondary schools had set procedures for acceptance. The district also maintained community education centers that offered secondary school completion courses. Information about students who attended the community education centers was not included in this study.

3.1.5 Research Procedures

Prior to beginning this study, the potential project was discussed with the Sunnyville School District Director of Student Support Services and the Sunnyville Assistant Superintendent with responsibility for special education. The research proposal was then submitted to the Sunnyville School District “senior team” for approval to undertake the file reviews. This approval was subsequently received by email from the District Superintendent. The methodology and proposed procedures were also discussed and planned with the researcher’s dissertation committee.

In order to generate a list of students to be included in the study, a database of all students in the school district identified for Ministry of Education purposes as requiring moderate and intensive levels of support for their behaviour and mental health concerns on May 30, 2008, was requested, and received. This date was chosen to
capture the designations put in place for the school year but not the changes being put in place for the subsequent school year. During July and August 2008, files, computer printouts, data file cards, and other district held data banks of information were made available to complete the file reviews for each of the students designated with a behaviour disorder on May 30, 2008.

As expected with utilizing archival information, certain limitations were found. Most notable was that the files that contained archival information did not have precisely what was wanted or expected (Elder, Pavalko, & Clipp, 1993). For instance, it was expected that the district’s overview sheets that were to include the student’s diagnoses, name of the parent(s)/guardians, documentation sources for diagnoses, assessment information, student strengths, student weaknesses, and support services received, would be contained in all files, as they were requested to be received by the Student Support Services administration yearly. When the project was initially discussed with the Sunnyville School District Director of Special Education, these overview sheets were thought to contain much of the information required for this study, however, their inclusion in the files was irregular. Some files contained overview sheets for each and every year the students were identified, other files contained overview sheets for some years, and still other files contained no overview sheets at all. As the documentation in the overview sheets was variously available and when available it was often sketchy, lacked clarity, specificity, and time reference, it was determined that the overview sheets would be used to augment other information available in the files and complete reviews of files would be undertaken.

Another limitation was that some documentation expected to be in the files was incomplete or out of date. One example included medical diagnoses that were referenced but were not supported by original documents. Sometimes documentation of diagnoses included in files was limited to those critical for identification for special education purposes and not to full historical understanding. As well, sometimes the files referenced goals that supposed an issue but the issue was not referenced. For example, a goal to reduce distractibility may have been included without a file document stating that the student was distractible or had a diagnosis such as ADHD. At other times the presenting behaviours did not align with the proposed, described, or provided interventions or the special education identification category or categories in which the student was identified. Sometimes it could be assumed that a student had previously experienced a significant level of problematic behaviour and intervention because of the intervention services referenced, such as a notation stating that the student was a participant in a program for students with fire starting behaviour, but no reference to fire starting was included anywhere in the file. A decision was made to include information referenced with sources (e.g., a Children’s Hospital report referencing a medical report from a paediatrician), and to presume that intervention supposed the need for such (e.g., intervention documented for fire starting behaviours was indicative of a problem with starting fires. The amount of information held in files also varied significantly. Whereas some files contained file reviews and information from each year of schooling; others contained the minimal amount of information initially required to attain and support
special needs identification. This meant that some chronological cross case analysis could not occur.

The data contained in the district held data sources consisted of some or all of: permissions for services with basic home information; integrated case management notes; individual education plans; psychological and medical reports; school based team minutes; student support service database information; correspondence with the school; file reviews; report card marks; and various other documents. From these documents, a varying amount of the following information was collected for the file reviews:

1. Student general information
   a. date of birth/age/grade
   b. gender
2. Family characteristics
   a. ethnic/cultural/background/home language identification
   b. current living arrangements (in care, with parent(s), guardian(s), in an independent living situation, with grandparents)
   c. postal code
3. Student disability characteristics
   a. previous medical issues (e.g., birth information, ongoing health issues)
   b. past and current diagnoses
   c. disability trajectory (progression of need)
   d. descriptions of behaviours
4. Student achievement/cognitive/skill levels and services
   a. achievement assessment information
   b. cognitive assessment information
   c. speech and language information
   d. occupational/physiotherapy information
   e. other support services received
5. Student school achievement information
   a. current report card information including school descriptions of areas of strength and need
   b. personal record card information
6. Student school absences and tardiness
7. Student support services received at school
   a. kinds of services
   b. goals of services
8. Student school information
   a. number and names of different schools attended by grade
   b. school districts attended
9. Student community intervention information
   a. kinds of community intervention.

To maintain the anonymity of students and to organize the information, each student on the data list was given a unique code number based on his/her current grade, current special needs identification(s), and an individual identification number. For example, a code of 5R16 indicated that the child was in Grade 5, was currently identified
in the “Students Requiring Moderate Behaviour Support or Mental Illness” category, and was the 16th file review completed by the researcher for students in that grade and category. Code references were only placed on the file review summaries, which were maintained separately from all data summaries and analyses. A one page file review summary was generated for each of the students on the data list. These file reviews were read numerous times by the researcher in order to gain familiarity with the information. Grade level charts were then compiled with hand notations listed for each student under the following columns: code reference; gender; school; Ministry of Children and Family Services received; medical services received; community services received; legal involvement; school services received; disorders (e.g., anxiety, depression) diagnosed or described; brief descriptions of the students’ problems; information about the students’ caregiver(s); cognitive information; when special needs identification(s) had occurred and the length of time it had been maintained; other identification(s), when they had occurred and the length of time they had been maintained; number and name of other schools and districts attended; other program information (e.g., French Immersion, Aboriginal Education Services; English as a Second Language Services); as well as miscellaneous other information.

Further comparative charts and grids were developed as they were needed in order to compile and compare information of interest. Subsequently, it became evident that more specificity was required regarding diagnoses and descriptions of behaviour. A separate database was then developed from the file reviews in order to separately code all diagnoses and specific descriptions of behaviour for each student. For these additional coding sheets, diagnoses were given a further numeric identification to differentiate kinds of identification. These were:

1 specifically diagnosed by a medical professional qualified to make such a diagnosis;
2 somewhat diagnosed by a medical professional qualified to make such a diagnosis (i.e., “suspected”, “signs of”, “possible”, “symptoms of”, “appears to meet criteria for”, “on medications for”, “behaviours consistent with”); and
3 not diagnosed but described (e.g., “hospitalized for a suicide attempt” without a diagnosis of “suicidal ideation” was coded with #3).

As the study progressed, the abundance of qualitative information collected on hand charts necessitated the use of numeric analysis to better organize the information using total numbers or percentages that were inputted into a Microsoft Excel spreadsheet. Some information collected was not used or reported in this study. First, as most individual education plans and integrated case management plans were not in the student files, these documents were only used to identify needs and service provision. Second, although it was suggested that the availability of home postal codes in files might make it possible to generate a socioeconomic profile of the students, and this information was later collected from all files, in consultation with the researcher’s dissertation committee, it was determined that socioeconomic status would not be analyzed in this study. Third, a data list of all students who received Aboriginal Services was also provided by the District Aboriginal Services Principal and this identification list was compared with the support services list so that all students who had received this
additional service were identified, but, in consultation with the researcher’s dissertation committee, it was decided that by identifying this service, a specific population would be also be identified and therefore information about services provided to aboriginal services would not be analyzed in this study. Fourth, English as a Second Language service was not described in this study as these services were not identified in the support services files. Fifth, services provided by school counsellors were not identified in this study. Although permission for services forms for services received from elementary school counsellors were placed in the files, permission forms for counselling from high school counsellors were not included in the district level files. Sometimes counselling services were identified on the individual education plan cover sheets. When counselling services were identified from the elementary school district based permission for service forms signed by parents and/or guardians, monikers such “personal issues” were used to describe issues as varied as ongoing suicide attempts to the developing of more friendships, so this information was less comparable and meaningful. For these reasons it was decided to not reference the services of school counsellors in this study.

For the 229 students in Grades 8-11, pass rates on their four core courses or successful graduation from high school with a BC “Dogwood” Certificate of Graduation for students in Grade 12 were collected based on data available as of June 30. This information was added to the Microsoft Excel computer database. When notations about reasons for course incompletion were available in student files, this information was also added to the individual file reviews. In order to maintain statistical accuracy, consultation and services were received from the Simon Fraser University Surrey Statistical Consulting Service. This service reviewed the anonymous computer data set and developed tables of students in Grades 8-12 who were successful and who were not successful in completing four core courses successfully or in graduating with a BC “Certificate of Graduation” by June 30, 2008 for a list of factors provided to them. In order to compare the identity of students identified with “Behavioural Needs or Mental Illness” in the Sunnyville School District with information from elsewhere and to understand the information available about the identity and school success of students with E/BD, an ongoing literature search of academic articles related to the cognitive ability, achievement, learning, and academic/family/community support systems for students with behavioural disorders, and the prevalence of mental health disorders in children and youth, was undertaken between 2005 and 2009. From approximately 2000 articles read that were applicable to this study, notes were compiled in order to:

- help determine topics from which to create an identity of the students with E/BD in the Sunnyville School District and elsewhere;
- help contrast and compare the identity of students with E/BD in the Sunnyville School District with information about students with E/BD from elsewhere;
- help develop an understanding of school success and the lack thereof in children and youth with E/BD; and,
- provide research findings on interventions to assist children and youth with mental health disorders grade-to-grade transition in school and graduate with a BC “Dogwood” Certificate of Graduation.
As the study contained all possible subjects in the category and did not sample, the information is reliable. For this study “what is, is” for all students identified with E/BD for BC Ministry of Education purposes, on May 30, 2008, in the Sunnyville School District.
4: FINDINGS

4.1.1 Introduction

Students with E/BD are recognized in BC and elsewhere for their learning difficulties; academic underachievement; poor skill levels; course and grade failure; school noncompletion; as well as for the difficulties school systems have in engaging, teaching, and maintaining them in school. As I had been asked by the Director of Special Education in the school district in which I was employed why so few of our students identified with E/BD were graduating from high school with a BC “Dogwood” Certificate of Graduation within six years from the time they first enrolled in Grade 8, and what we as a school system could do about this lack of success, I decided to find answers to these two questions in research.

In July and August 2008, the months I had been granted access to the archival information in the Student Support Services office in the Sunnyville School District, I began my research related to the 384 students with primary identification as students with “Behavioural Needs or Mental Illness” on the computer printout generated on May 30, 2008 provided to me by the Director of Student Support Services in that district. The first question I answered is:

What is known about the identity of students, in the school district utilized for this study, who are identified with “Behavioural Needs or Mental Illness” at the two levels of severity: “Students Requiring Moderate Behaviour Support or Students with Mental Illness”; and, “Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness”?

In order to answer this question, I completed file reviews on the 384 students identified with E/BD on May 30, 2008 from the district held student support services files. Once the first question was answered, I could answer the following question:

What individual, family, community, and school factors are associated with the successful grade-to-grade transition and graduation of students identified with “Behavioural Needs or Mental Illness” for special education purposes, in Grades 8-12, in a suburban school district in British Columbia, Canada?

In order to answer this second question, relevant individual, school, family, and community support information about the students in the Sunnyville School District who
were identified with E/BD needed to be collected and compared to the success criteria so that findings could be compared to the literature by comparing the 229 students in Grades 8-12, who successfully passed their four core courses (English, a social studies course, a mathematics course, and a science course) or had successfully graduated from high school with a BC “Dogwood” Certificate of Graduation as of June 30 with those who were not successful in meeting these criteria. Tables could then be generated that compared these two groups with the factors developed from the file reviews of the students so that I could answer the third question:

How does the case study evidence from the selected school district compare with literature about children and youth identified with E/BD in populations and schools from elsewhere?

The evidence generated in this study could then be compared with the literature and recommendations for practice. In the end, I could address the primary research question:

What factors are associated with the successful grade-to-grade transition and graduation of high school students identified with “Behavioural Needs or Mental Illness” in a suburban school district in BC, Canada?

4.1.2 Assumptions

As I set out to identify factors associated with the successful grade-to-grade transition and graduation of high school students identified with “Behavioural Needs or Mental Illness” (E/BD) in the Sunnyville School District so that I could better understand factors contributing to their school success, I made a number of assumptions. First, I assumed that the Sunnyville School District’s practices aligned with The BC Special Education Services: A Manual of Policies, Procedures and Guidelines (BC MoE, 2008) that described the acceptable practices and policies for working with students identified with E/BD, specifically recognized as having “Behavioural Needs or Mental Illness” in the province, and identified for special education purposes at the two levels of severity: “Students Requiring Moderate Behaviour Support or Students with Mental Illness”; and, “Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness”. These included:

- initial management of students through classroom and school wide discipline and/or school counselling or other kinds of individual services and interventions;
- consultation with parents;
- consultation and collaboration with school-based teams and other school or district support services;
• consultation and collaboration with community services that address the student’s behaviour at school, at home, and in the community;
• the development of IEPs with goals that addressed the students’ behaviour or social/emotional needs or conditions of the mental illness as well as measures for student achievement;
• the provision of one or more of direct interventions in the classroom; and
• the placement of students in a program designed to promote behavioural change and implement the IEP; and/or “ongoing, individually implemented social skills training, and/or instruction in behavioural and learning strategies” (BC MoE, 2008, n. p.).

Second, I also assumed that criteria for successful grade-to-grade transition and graduation with a BC “Dogwood” Certificate of Graduation were consistent throughout the Sunnyville School District. Finally, as the manual described involvement of the education system, parents, and community in addressing the behaviour of students identified with E/BD, as well as documentation of this behaviour in the multiple environments in which these students interacted and were influenced, I assumed that evidence of this involvement was contained in the students’ district held files.

Third, by bounding this multiple case study within one school district, by students identified within one disability category, on one date, and by using student archival information from one locale, I assumed that I could provide a reliable overview of the characteristics of students identified with E/BD in the district at one point in time, as well as information about factors that were associated with their successful grade-to-grade transition in high school and graduation from high school with a BC “Dogwood” Certificate of Graduation.

4.1.3 Overview of the Research Context

The Sunnyville School District is located in BC, Canada. It is both urban and rural. The district covers a catchment area that reported a population of approximately 85,000 in 2006, 23% of whom were between 0 and 17 years old (Statistics Canada, 2006). The 2006 census report stated that 81.7% of 18 year olds in the Sunnyville area had graduated from high school compared to 73.8% of students who had graduated from high school overall in BC. Of families with children, 77.5% were headed by couples and 22.5% were headed by lone parents. The incidence of low income families was 11.1% compared with 13.3% overall in BC, and the percentage of children less than 19 years of age receiving income assistance and living with a single parent was 1.9% compared to 2.7% in BC overall. The census described the ethnic visible minority origins in the Sunnyville area as: Aboriginal peoples (3.0%); South Asian (3.0%); Chinese (2.7%); and Filipino (1.3%). For the 2007-08 school year, the district reported to the Ministry of Education that 90.88% of the students in the district spoke English in their homes followed by 2.41% who spoke Korean, 0.97% who spoke Punjabi, and 0.96% who spoke Spanish.

At the time of this study, during the 2007-08 school year, the Sunnyville School District’s 22 elementary schools served students in Kindergarten to Grade 7.
students), and the district’s 6 secondary schools and 2 alternate schools served students in Grades 8-12 (7074 students). One of the alternate schools served students from Grades 8-12 and the other served students from Grades 10-12. The district also provided community education centers that offered secondary school completion courses but students from these settings were not included in this study as they were not identified in the Sunnyville support services office data sheets as students who received special education services. Whereas each of the 22 elementary schools and the 6 secondary schools in the district were inclusive in nature and were considered to be neighbourhood schools, the 2 alternative secondary schools had set criteria for acceptance. Attendance at the alternative secondary schools had a pattern of increased enrolment over the previous five years from 186 students in the 2003-04 school year, to 271 students in the 2007-08 school year. In the 2007-08 school year, the alternate secondary schools served 1.1% of the secondary school population (MoE Analysis and Reporting Group, 2008) and 24% of the students identified with E/BD. The district also enrolled 1440 students in French Immersion programs that were housed within regular schools.

As do all school districts in BC, the Sunnyville School District reports education numbers to the Ministry of Education and receives operating grants based on actual enrolments as reported on September 30 of each year (BC MoE, website). Basic allocations are provided by the government to the district based on the number of school age students enrolled on that date. Additional supplementary funding is provided for students with special needs who “may require additional support and accommodations to enable them to access and participate in educational programs” (BC MoE, website). For September 30, 2007, the Sunnyville School District reported to the Ministry of Education:

- total student enrolment-15,358 (7457 females; 7901 males)
- school age student enrolment-15,113
- students with special needs-1353
- students with behavioural disorders- 365
  - students identified in the “Students Requiring Moderate Behaviour Support or Students with Mental Illness” (Moderate Behaviour Support/Mental Illness) category- 172
  - students identified in the “Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness” (Intensive Behaviour Interventions/Serious Mental Illness) category-193.

In the Sunnyville School District, as identified to the Ministry of Education for the 2007-08 school year, students with E/BD represented 2.38% of the total student enrolment, 2.42% of the school age student enrolment, and 26.98% of the students identified with special needs. Students identified in the moderate category represented 1.12% of the total student enrolment, and students identified in the intensive/serious category represented 1.26% of the total student enrolment. These percentages are compared to the 1.22% of students province-wide for the 2007-08 school year who were identified in the moderate category, and the 1.22% of students province-wide for the 2007-08 school year who were identified in the intensive/serious category. Thus, the percentages of
students identified in the Sunnyville School District were consistent with those identified overall in BC. The numbers reported by the district for the 2007-08 school year reflected a trend towards increased numbers in both the moderate and intensive/serious categories despite overall stable to declining enrolment in the Sunnyville School District (Table 6).

Table 6  Students Identified in the Moderate and Intensive/Serious Categories and Overall as Reported to the Ministry of Education on September 30 by Year (BC, MoE, 2007, Summary)

<table>
<thead>
<tr>
<th>School Year</th>
<th>Total Student #</th>
<th>Moderate Level</th>
<th>Intensive/Serious Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-03</td>
<td>15,409</td>
<td>Not reported</td>
<td>119</td>
</tr>
<tr>
<td>2003-04</td>
<td>15,889</td>
<td>158</td>
<td>153</td>
</tr>
<tr>
<td>2004-05</td>
<td>15,871</td>
<td>159</td>
<td>170</td>
</tr>
<tr>
<td>2005-06</td>
<td>15,721</td>
<td>169</td>
<td>180</td>
</tr>
<tr>
<td>2006-07</td>
<td>15,721</td>
<td>175</td>
<td>188</td>
</tr>
<tr>
<td>2007-08</td>
<td>15,358</td>
<td>172</td>
<td>193</td>
</tr>
</tbody>
</table>

Comments

1. Students identified with E/BD represented 2.42% of the school age student enrolment and 2.38% of the total student numbers in the Sunnyville School District, a percentage consistent with that identified overall in the province.

2. Although the graduation rate of 81.7% for 18 year olds in the Sunnyville area was higher than the graduation rate of 73.8% overall for 18 year olds in BC, the percentage of students identified with E/BD in the Sunnyville School District was consistent with the overall percentage identified in BC.

3. The incidence of low income families receiving income assistance in Sunnyville was 11.1% compared with 13.3% overall in BC. This suggests that poverty may have been somewhat less of a problem in the Sunnyville School District than overall in the province.

4. As 10% of students in Sunnyville School District reported having ethnic minority origins, multicultural issues may have been less of a concern for students with E/BD in the Sunnyville area than elsewhere in the province.

5. As English was spoken in the homes of 90.88% of students in the Sunnyville School District, a lack of knowledge of English may have been less of a concern for students with E/BD in the Sunnyville area than elsewhere in the province.

6. Enrolment at the alternate secondary schools showed a trend towards increased numbers. The reasons for these increases are not known. It may have been that students with E/BD stayed in alternate schools longer or that more students with E/BD chose to attend alternate schools for some other reason(s).

7. A trend towards increased rates of identification of students with E/BD is noted. It is unknown whether this reflected:
   - changes in rates of identification due to changes in the BC Ministry of Education and/or school district policy; and/or
• an increased need for identification of students with E/BD in the district; and/or
• more students identified with E/BD in the Sunnyville School District staying in school longer; and/or
• a greater diligence in identification of students with E/BD in the Sunnyville School District, and/or
• a decreased diligence in removal of students from E/BD identification in the Sunnyville School District when the students’ needs lessened; and/or
• identification of students with less severe needs in the “Students with Behavioural Needs or Mental Illness” categories over time in the Sunnyville School District.

4.2 Responding to Question One

This section responds to first research question:

What is known about the identity of students, in the school district utilized for this study, who are identified with “Behavioural Needs or Mental Illness” at the two levels of severity: “Students Requiring Moderate Behaviour Support or Students with Mental Illness”; and, “Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness”?

4.2.1 The Selected Students

I was provided with a computer printout listing the students identified with E/BD in the Sunnyville School District by the Director of Student Support Services on May 30, 2008. The May 30 date was chosen to capture the students who had been identified during the 2007-08 school year before students were removed or added to the Ministry of Education identification list at year end in anticipation of the subsequent school year. For each student listed on the printout, there was an identification number, birth date, school placement, grade, and the category or categories in which the student was currently identified. The computer printout listed 384 students who were identified as students with “Behaviour Needs or Mental Illness” as of that date. There were 155 students in Kindergarten to Grade 7 who were designated with “Behaviour Needs or Mental Illness”. These students attended the district’s 22 neighbourhood schools. The printout also listed 229 students in Grades 8-12 who attended the district’s 6 neighbourhood high schools and 2 alternate high schools. One high school student was unassigned to a school on May 30; 173(75.5%) attended regular schools; and 55(24.0%) attended the district’s 2 alternate high schools. Of the students in the two alternate high schools, 22(9.6%) were identified in the moderate category, and 33(14.4%) were identified in the intensive/serious category.
For each student listed on the printouts, the file room contained an individual file of important information, used to identify and maintain students for special education purposes. The student support services office also held other information such as computer printouts of information, file cards, and online databases. These sources were the ones that I was given access to in July and August 2008 to complete individual file reviews. For each student, a one page file review was completed, identifying the student only by a code number to maintain anonymity. From these file reviews, databases of information were developed.

4.2.2 Changes from September 30, 2007 to May 30, 2008

Although the Sunnyville School District reported 365 students with E/BD to the Ministry of Education on September 30, 2007 (172 in the moderate category and 193 in the intensive/serious category), the numbers of students identified in each category had changed by May 30, 2008. On May 30, district held data indicated that 384 school age students were now identified with E/BD. This reflected an overall headcount increase of 19 students. The number of students identified in the moderate category had increased by 20 students, and the number of students identified in the intensive/serious category had decreased by 1 student (Table 7). Information from the student files indicated that 29 students identified in the moderate category had been added to the Ministry of Education identification list after September 30. Over the 8 months, 18 students had been newly identified in the Sunnyville School District in the moderate category and 9 students who had been previously identified in the intensive/serious category were now designated in the moderate category. Extrapolated information suggests that 7 students were removed from the moderate category during the 8 months. Of the 18 students newly identified in the moderate category, 4 had transferred in from other districts with behavioural history and/or identification. These students were in Grades 5, 6, 8, and 10. Of the remaining 14 students newly identified in the moderate category, 3 were in Kindergarten to Grade 3; 5 were in Grades 4-7; and 6 were in Grades 8-10. In the moderate category over the course of the 8 months, the number of females had increased by 15 whereas the number of males had only increased by 5.

Of the students identified in the intensive/serious category, there was a net decrease of 1 student between September 30, 2007 and May 30, 2008, however, 25 students had been newly identified in the category, and 9 students had been transferred out of the category into the moderate category (Table 7). Extrapolated information suggests that 17 other students were removed from the category. Of the 25 students newly added to the intensive/serious category subsequent to the September 30 headcount, 10 had transferred in from other districts with behavioural history and/or identification and these students were identified in the E/BD categories upon transfer. These transferred students ranged from Grades 3-9; 5 of the students were in Grades 3-6, and 5 were in Grades 8-9. An additional 15 students were identified with E/BD for the first time. These newly identified students were in Kindergarten to Grade 10. Five were

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11 File folders for 2 students were not located, however information from other sources such as file cards and computer printouts were used to complete these students' reviews.
in elementary school; the other 10 were in Grades 8-10. No students in Grades 11 or 12 were newly identified in the intensive/serious category during the 8 months. The numbers of both male and female students remained much the same in the intensive/serious category during the 8 months from September 30 to May 30 with a reduction of only 1 female student in the category.

During the 8 months between the Ministry headcount on September 30, 2007 and May 30, 2008, 45 additional students had been added to the moderate or intensive/serious categories and 24 of the students reported to the Ministry on September 30, 2007 were no longer identified in the Sunnyville School District with primary identification as students with E/BD on May 30, 2008. An additional 9 students had changed from one E/BD category to the other. This represented a 12% addition of new students to the September 30 headcount and a removal of 7% of students from the September 30 headcount by May 30. As well, 2% of the students had changed from one E/BD category to the other over the 8 months.

Table 7  Students Identified in the E/BD Categories: September 30, 2007 and May 30, 2008 Compared

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of males: 125</td>
<td>(72.7% of category)</td>
<td># of males: 130</td>
</tr>
<tr>
<td># of females: 47</td>
<td>(27.3% of category)</td>
<td># of females: 62</td>
</tr>
<tr>
<td>Total: 172</td>
<td></td>
<td>Total: 192</td>
</tr>
<tr>
<td>Intensive/Serious</td>
<td></td>
<td></td>
</tr>
<tr>
<td># males: 125</td>
<td>(64.8% of category)</td>
<td># of males: 125</td>
</tr>
<tr>
<td># of females: 68</td>
<td>(35.2% of category)</td>
<td># of females: 67</td>
</tr>
<tr>
<td>Total: 193</td>
<td></td>
<td>Total: 192</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of males: 250</td>
<td>(68.5% of total)</td>
<td># of males: 255</td>
</tr>
<tr>
<td># of females: 115</td>
<td>(31.5% of total)</td>
<td># of females: 129</td>
</tr>
<tr>
<td>Total: 365</td>
<td></td>
<td>Total: 384</td>
</tr>
</tbody>
</table>

Comments

1. There was a net increase in the number of students identified with E/BD during the 8 months from September 30 to May 30 as a result of students being newly identified in the moderate category. As rates of identification reported to the Ministry on September 30 increased less than the rates of newly identified students would indicate and, as the rates had remained somewhat consistent from year to year, it may be that removal of identification primarily happened at the end and start of school years.

2. Although 29 students had been newly added in the moderate category, and 25 students had been newly added in the intensive/serious category during the 8 months, there were 7 students who had been removed from the moderate category.
category and 17 students who had been removed from the intensive/serious category during this time. It is unknown why almost twice as many students in the intensive/serious category as in the moderate category were no longer identified. As the rate of migration out of the district may approximate that in to the district (10 students), it may be that approximately 7 students left the school system during the 8 months.

3. More females (15) than males (5) were newly identified with E/BD during the 8 months, perhaps reflecting the increased proportion of females identified with E/BD in high school in the district.

4. The fluidity of students being removed and added to the E/BD categories during the 8 months suggests that there were always students about to be identified for whom school wide or targeted interventions may have reduced the need for behavioural identification, and there were always students whose behaviours were improving such that removal of identification was imminent, for whom the interventions provided were effective but for whom further intervention and monitoring would be beneficial. The addition of 14 students with behavioural disorders from other districts between September 30 and May 30 provides an indication of the inter-district transfer rate for students with E/BD over the course of the school year, supporting the need for midyear transition procedures to be maintained among districts.

5. As 24 students were removed from the E/BD categories during the 8 months, it would be informative to know why these students were no longer identified. It was unreported as to whether they no longer required support for their behaviours, whether they had been removed from the special education identification list because they had transferred to other districts or whether they had dropped out of school. Although information may have been known on an individual student basis, collective information would provide an indication of the need for follow up services. This information may support the need for specific formalized transition procedures to be developed for transitions between school districts and community services and it may provide an indication of the need for specific support services for students who drop out of school.

6. As there were no Grade 11 or 12 students who had been newly added to either the moderate or the intensive/serious E/BD categories between September 30 and May 30, it is suggested that students identified with E/BD in Grades 11 and 12 were not mobile during the school year and/or that problematic behaviours were less likely to newly emerge for students in these grades. Further research would provide information regarding the relationship between student mobility and successful grade-to-grade transition from Grade 11 to 12 and graduation from high school with a BC “Dogwood” Certificate of Graduation.

### 4.2.3 Numbers and Percentages of Students by Category, Grade, and Gender

Numbers and percentages of students identified with E/BD by category, grade, and gender for the Sunnyville School District are provided in Table 8 by grade level and
overall. Both total numbers and percentages of students identified are provided as the Sunnyville School District was experiencing consistent to declining enrolment such that the proportion of grade information presents differently from total count information.

<table>
<thead>
<tr>
<th>Total # of Students by Grade</th>
<th>Moderate (% of grade)</th>
<th>Intensive/ Serious (% of grade)</th>
<th>Total Males/Females (% of grade)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>males -4</td>
<td>females -2</td>
<td>males – 7 (0.75%)</td>
</tr>
<tr>
<td>937</td>
<td>total-6 (0.64%)</td>
<td>total-5 (0.53%)</td>
<td>total – 11 (1.17%)</td>
</tr>
<tr>
<td>Grade 1</td>
<td>males -5</td>
<td>females -2</td>
<td>males – 10 (1.11%)</td>
</tr>
<tr>
<td>901</td>
<td>total-7 (0.78%)</td>
<td>total-7 (0.78%)</td>
<td>total – 14 (1.55%)</td>
</tr>
<tr>
<td>Grade 2</td>
<td>males -7</td>
<td>females -2</td>
<td>males – 16 (1.69%)</td>
</tr>
<tr>
<td>948</td>
<td>total-9 (0.95%)</td>
<td>total-9 (0.95%)</td>
<td>total – 18 (1.90%)</td>
</tr>
<tr>
<td>Grade 3</td>
<td>males -6</td>
<td>females -1</td>
<td>males – 12 (1.26%)</td>
</tr>
<tr>
<td>949</td>
<td>total-6 (0.63%)</td>
<td>total-7 0(0.74%)</td>
<td>total – 13 (1.37%)</td>
</tr>
<tr>
<td>Grade 4</td>
<td>males -9</td>
<td>females -2</td>
<td>males – 18 (1.75%)</td>
</tr>
<tr>
<td>1026</td>
<td>total-11 (1.7%)</td>
<td>total-11 (1.07%)</td>
<td>total – 22 (2.14%)</td>
</tr>
<tr>
<td>Grade 5</td>
<td>males -12</td>
<td>females -3</td>
<td>males – 20 (1.86%)</td>
</tr>
<tr>
<td>1078</td>
<td>total-14 (1.30%)</td>
<td>total-11 (1.02%)</td>
<td>total – 25 (2.32%)</td>
</tr>
<tr>
<td>Grade 6</td>
<td>males -8</td>
<td>males -6</td>
<td>males – 14 (1.15%)</td>
</tr>
<tr>
<td>1219</td>
<td>total-9 (0.74%)</td>
<td>total-8 (0.66%)</td>
<td>total – 17 (1.39%)</td>
</tr>
<tr>
<td>Grade 7</td>
<td>males -17</td>
<td>males -12</td>
<td>males – 29 (2.37%)</td>
</tr>
<tr>
<td>1226</td>
<td>total-22 (1.79%)</td>
<td>total-13 (1.06%)</td>
<td>total – 35 (2.85%)</td>
</tr>
<tr>
<td>Grade 8</td>
<td>males -15</td>
<td>males -8</td>
<td>males – 23 (1.81%)</td>
</tr>
<tr>
<td>1274</td>
<td>total-19 (1.49%)</td>
<td>total-19 (1.49%)</td>
<td>total – 38 (2.98%)</td>
</tr>
<tr>
<td>Grade 9</td>
<td>males -11</td>
<td>males -25</td>
<td>males – 36 (2.71%)</td>
</tr>
<tr>
<td>1330</td>
<td>total-21 (1.58%)</td>
<td>total-38 (2.86%)</td>
<td>total – 59 (4.44%)</td>
</tr>
<tr>
<td>Grade 10</td>
<td>males -7</td>
<td>males -19</td>
<td>males – 26 (1.68%)</td>
</tr>
<tr>
<td>1552</td>
<td>total-19 (1.22%)</td>
<td>total-35 (2.26%)</td>
<td>total – 54 (3.48%)</td>
</tr>
<tr>
<td>Grade 11</td>
<td>males -16</td>
<td>males -9</td>
<td>males – 25 (1.67%)</td>
</tr>
<tr>
<td>1497</td>
<td>total-24 (1.60%)</td>
<td>total-21 (1.40%)</td>
<td>total – 45 (3.01%)</td>
</tr>
<tr>
<td>Grade 12</td>
<td>males -14</td>
<td>males -5</td>
<td>males – 19 (1.34%)</td>
</tr>
<tr>
<td>1421</td>
<td>total- 25 (1.76%)</td>
<td>total-8 (0.56%)</td>
<td>total – 33 (2.32%)</td>
</tr>
</tbody>
</table>

Table 8 Students with E/BD by Grade, Behaviour Category, and Gender
1. Information from Table 8 and supporting graphs, Figure 2 and Figure 3, indicate that:
   - There were more students identified with E/BD in Grades 8-11 than in each year of elementary school (Figure 2);
   - The overall number of students identified with E/BD peaked in Grade 9 and declined thereafter (Figure 2);
The number of students identified in the intensive/serious category peaked in Grade 9 and declined thereafter (Figure 2);
The number of students identified in the moderate category generally increased from Grade 7 on with no peak in Grade 9 (Figure 2);
The percentage of students identified with E/BD was higher in Grades 8-11 than in each year of elementary school (Figure 3);
The overall percentage of students identified with E/BD peaked in Grade 9 (Figure 3);
The percentage of students identified with E/BD in the intensive/serious category peaked in Grade 9 (Figure 3);
The percentage of students identified in the moderate category was greater than students identified in the intensive/serious category most noticeably in Grades 5, 7, 11 and 12 (Figure 3).

2. Overall and by percentage of students with E/BD at each grade level, more students in Grade 9 were identified with E/BD than in any other grade. It is unknown whether this was the result of students whose behaviour problems had emerged in earlier grades being identified in Grade 9 or whether more students were having difficulty in Grade 9, or whether student behaviours continued to increase throughout high school but the declines in numbers of students identified with E/BD in Grades 10, 11 and 12 were the result of students with E/BD having dropped out of school.

3. The reasons for the increase in the number of students identified in the moderate category from Grade 7 on are unknown. It could be that behaviour difficulties became more severe in high school or that behaviours were recognized more often in high school.

The number and percentage of males and females identified with E/BD in each grade are provided in Table 9 and this information is graphed in Figures 4, 5, and 6. Table 9 shows that in Kindergarten to Grade 3, males were identified with E/BD at a rate 4.6 times greater than for females; in Grades 4-7, males were identified with E/BD at a rate 4.4 times greater than for females; and, in Grades 8-12 males were identified at a rate 1.3 times greater than form females. Figure 4 shows that the number of males identified with E/BD exceeded that for females in each grade except in Grade 10 where the number of females identified exceeded that for males. Males constituted 78.6% of students identified with E/BD in Kindergarten to Grade 3; 81.8% of students identified with E/BD in Grades 4-7; and 58.3% of students identified with E/BD in Grades 8-12. Figure 5 shows that in the moderate E/BD category, the number of males identified in Grade 7 was higher than in other grades in elementary school. Figure 6 shows that in the intensive/serious category, both males and females were identified less often in Kindergarten to Grade 7 than in Grades 8-12. Although the number of males identified in the intensive/serious category declined from Grades 7 to 8, the number increased in Grade 9 and then declined again in Grades 10 to 12. The number of females identified in the intensive/serious category also increased in Grades 8, 9, and 10 but declined thereafter. There were more girls than boys identified in the intensive/serious category in both Grades 8 and 11.
Table 9  Percentage of Males and Females Identified with E/BD in the Moderate, Intensive/Serious Categories, and Overall by Grade Grouping

<table>
<thead>
<tr>
<th>Category</th>
<th>Moderate (% of Group)</th>
<th>Intensive/Serious (% of Group)</th>
<th>Overall (% of all)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten to Grade 3</td>
<td># of males-22 (78.6)</td>
<td># of males-24 (85.7)</td>
<td># of males-46 (82.1)</td>
</tr>
<tr>
<td></td>
<td># of females-6 (21.4)</td>
<td># of females-4 (14.3)</td>
<td># of females-10 (17.9)</td>
</tr>
<tr>
<td>Grades 4-7</td>
<td># of males-45 (81.8)</td>
<td># of males-35 (81.4)</td>
<td># of males-80 (81.6)</td>
</tr>
<tr>
<td></td>
<td># of females-10 (18.2)</td>
<td># of females-8 (18.6)</td>
<td># of females-18 (18.4)</td>
</tr>
<tr>
<td>Grades 8-12</td>
<td># of males-63 (58.3)</td>
<td># of males-66 (54.6)</td>
<td># of males-129 (56%)</td>
</tr>
<tr>
<td></td>
<td># of females-45 (41.7)</td>
<td># of females-55 (45.5)</td>
<td># of females-100 (44%)</td>
</tr>
<tr>
<td>Overall</td>
<td># of males-130 (67.7)</td>
<td># of males-125 (65.1)</td>
<td># of males-255 (66.4)</td>
</tr>
<tr>
<td></td>
<td># of females-62 (32.3)</td>
<td># of females-67 (34.9)</td>
<td># of females-129 (33.6)</td>
</tr>
</tbody>
</table>

Figure 4  Numbers of Males and Females Identified in the E/BD Categories by Grade

Comments
1. As identification of students with E/BD in the Sunnyville School District increased sharply in high school, it is suggested that intervention may need to focus on the transition to high school and in Grades 8-10. Also, as there were higher numbers of males identified in the intensive/serious category in Grades 9 and 10, and there were more females than males identified in the intensive/serious category in Grades 8 and 11, additional emphasis may need to be placed on supporting males in Grades 9 and 10 and females in grades 8 and 11 with system of care interventions.
2. In a comparative sample of children and youth with E/BD from the U.S. based Special Education Elementary Longitudinal Study, and the National Longitudinal Transition Study-2, 80% of students identified with E/BD in elementary grades and
76% of students identified with E/BD in the secondary grades were male (Wagner et al., 2005). In the Sunnyville School District, 81.3% of students identified with E/BD in Kindergarten to Grade 7 were male, a percentage consistent with the U.S. sample. Far different percentages occurred in the Sunnyville School District secondary grades as males constituted 58.3% of the students identified with E/BD in the moderate category, 55.6% of the students identified with E/BD in the intensive-serious category, and 56.3% of students identified with E/BD overall. As the differences between the U.S. samples and the Sunnyville students occurred for
students identified in both categories differentiated by severity, the differences between the U.S. and Sunnyville populations did not depend on the severity of the population identified.

3. The U.S. based National Longitudinal Transition Study reported that approximately 20% of students with E/BD had first experienced difficulties before they began school; by age 8 over 60% had experienced difficulties; and, by the start of high school, approximately 84% had experienced difficulties (Marder, 1992). If the age of first difficulty is similar for students with E/BD in the Sunnyville School District, it may be that most first behaviour difficulties occurred between ages 5 and 8, approximately 8 or so years before the grades of greatest identification by the school system, from Grades 8 to 10. If this was also the situation in the Sunnyville School District, further confirmation is provided for the importance of schools continuing to address behavioural difficulties early on in elementary school.

4.2.4 Grades of First Identification

The grades in which students in the Sunnyville School District were first identified with E/BD provide an indication of when their behaviours emerged as significant enough for them to require special education identification. This information is captured in Table 10 in the category in which the students were identified on May 30, 2008. This table and the graph in Figure 7 show that students were newly identified with E/BD in each and every grade from before they entered school through to Grade 12 although being identified prior to school start or in Grades 11 and 12 was far less common. First identification for students in the moderate E/BD category was higher in Grades 5, 8 and 9, whereas first identification for students in the intensive/serious E/BD category rose slightly in Grade 1, more noticeably in Grade 7, and most obviously in Grade 9.

<table>
<thead>
<tr>
<th>Grade</th>
<th># Moderate -192</th>
<th># Intensive/Serious-192</th>
<th>Overall #-384</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to Kindergarten</td>
<td>9</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>15</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Grade 1</td>
<td>14</td>
<td>18</td>
<td>32</td>
</tr>
<tr>
<td>Grade 2</td>
<td>14</td>
<td>13</td>
<td>27</td>
</tr>
<tr>
<td>Grade 3</td>
<td>12</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>Grade 4</td>
<td>18</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>Grade 5</td>
<td>22</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>Grade 6</td>
<td>11</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>Grade 7</td>
<td>14</td>
<td>21</td>
<td>35</td>
</tr>
<tr>
<td>Grade 8</td>
<td>19</td>
<td>23</td>
<td>42</td>
</tr>
<tr>
<td>Grade 9</td>
<td>20</td>
<td>25</td>
<td>45</td>
</tr>
<tr>
<td>Grade 10</td>
<td>13</td>
<td>14</td>
<td>27</td>
</tr>
<tr>
<td>Grade 11</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Grade 12</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Unknown</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
</tbody>
</table>
Figure 7  
Grades of First Identification with E/BD for Students Currently Identified in the Moderate and Intensive/Serious Categories and Overall

Comments
1. Reasons that more students with E/BD were identified in specific grades and reasons for the declines in new identification in Grade 6 are not known. The increase in numbers of students identified in the moderate category in Grades 4 and 5 with a subsequent decline in numbers of students identified with E/BD in Grade 6 may be explored further to determine whether this was a typical pattern, particularly as this decline did not occur in the intensive/serious category.

2. Rates of new identification with E/BD dropped after Grade 9. Further research may determine why fewer students in Grades 10-12 were identified with E/BD. The lower rate may reflect lower rates, however the higher rates in earlier grades may also reflect that students who had transferred from other districts were newly identified when they enrolled in the Sunnyville School District and the files did not identify whether they had been identified with E/BD in previous school districts.

3. In a study by Malmgren and Meisel (2002), the average age of formal identification as a student with E/BD by a school system was 10.2 years, and the average age for identification of females was significantly older than for males. Information from the Sunnyville School District indicates that there was such a wide range of grades in which students were first identified that determining an average age would not have been meaningful although the rate of identification for females increased noticeably in high school.

4. A positive relationship between lower age of identification with E/BD and lower skills in math and reading as well as lower graduation rates and lower entry rates for college for those with externalizing behaviours were described by McLeod and Fettes (2007). Further study of students identified with E/BD in the Sunnyville School District may determine whether there was a relationship between age of identification and academic skill levels such that students who were identified earlier were those who required greater academic support. Further study would also clarify
whether males, who were more likely than females to be identified in elementary school, were more represented in the population with lower academic skill levels and whether gender was the determining factor rather than length of identification or whether externalizing or internalizing behaviours was more related to academic skill levels.

4.2.5 Years Identified as Students with E/BD

Students were newly identified with “Behavioural Needs or Mental Illness” in each grade, and students were removed from the identification lists in each grade when they no longer required support for their E/BD concerns or when they no longer met the criteria for identification in the categories. The number of years students were identified in the E/BD categories is presented in Table 11.

<table>
<thead>
<tr>
<th>Total # of Students Identified by Grade</th>
<th>Identified 0-2.0 Years</th>
<th>Identified 2.01-4.0 Years</th>
<th>Identified 4.01-6.0 Years</th>
<th>Identified 6.01 + Years</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten 11</td>
<td>11(100%)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Grade 1 14</td>
<td>11(78.6%)</td>
<td>3(21.4%)</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Grade 2 18</td>
<td>12(66.7%)</td>
<td>5(27.8%)</td>
<td>N/A</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>Grade 3 13</td>
<td>7(53.8%)</td>
<td>6(46.2%)</td>
<td>0(0.0%)</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Grade 4 22</td>
<td>15(68.2%)</td>
<td>4(18.2%)</td>
<td>2(9.1%)</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>Grade 5 25</td>
<td>11(44.0%)</td>
<td>9(36.0%)</td>
<td>4(16.0%)</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>Grade 6 17</td>
<td>8(47.1%)</td>
<td>6(35.3%)</td>
<td>2(11.8%)</td>
<td>1(5.9%)</td>
<td></td>
</tr>
<tr>
<td>Grade 7 35</td>
<td>16(45.7%)</td>
<td>13(37.1%)</td>
<td>2(5.7%)</td>
<td>4(11.4%)</td>
<td></td>
</tr>
<tr>
<td>Grade 8 38</td>
<td>21(55.3%)</td>
<td>8(21.1%)</td>
<td>3(7.9%)</td>
<td>6(15.8%)</td>
<td></td>
</tr>
<tr>
<td>Grade 9 59</td>
<td>35(59.3%)</td>
<td>16(27.1%)</td>
<td>3(5.1%)</td>
<td>5(8.5%)</td>
<td></td>
</tr>
<tr>
<td>Grade 10 54</td>
<td>29(53.7%)</td>
<td>12(22.2%)</td>
<td>6(11.1%)</td>
<td>5(9.3%)</td>
<td>2</td>
</tr>
<tr>
<td>Grade 11 45</td>
<td>15(33.3%)</td>
<td>18(40.0%)</td>
<td>6(13.3%)</td>
<td>6(13.3%)</td>
<td></td>
</tr>
<tr>
<td>Grade 12 33</td>
<td>7(21.2%)</td>
<td>10(30.3%)</td>
<td>5(15.2%)</td>
<td>9(27.3%)</td>
<td>2</td>
</tr>
<tr>
<td>Overall 384</td>
<td>198(51.6%)</td>
<td>110(28.6%)</td>
<td>33(8.6%)</td>
<td>36(9.4%)</td>
<td>7(1.8%)</td>
</tr>
</tbody>
</table>
This table shows that 198 (51.6%) of the students identified with “Behavioural Needs or Mental Illness” were identified for 2 or fewer years whereas 36 students (9.4%) were identified for more than 6 years. Although the number of years a student is able to be identified with E/BD is contingent on number of years the student has been in school, it is also recognized that few students are ever identified for many years.

**Comments**

1. As the most common length of time students were identified with E/BD was 1-2 years, it would be important to provide transition into programs, services within programs, and transition out of the programs with time duration in mind. Determining grade related issues may help schools put interventions in place to address common issues experienced at various grade levels.

2. Some few students were identified with E/BD for longer periods of time. Determining if or how these students differed from students who were identified with E/BD for shorter periods of time may provide insight as to why longer identification was needed for some students and not for others. It would also provide insight as to whether a different type of service or additional services or education in an alternative setting would be beneficial for students identified for longer periods of time.

4.2.6 **Fluidity between Categories**

Some students changed identification between the moderate and the intensive/serious E/BD categories. These changes may have resulted from a worsening or bettering of behaviour over time, from the addition of needed outside support services that would allow identification in the intensive/serious category when it had not occurred previously, or from removal of outside support services when it had occurred previously. Sometimes, for a variety of reasons, identification as a student with E/BD was entirely removed for a period of time. When the files were reviewed, information about the fluidity between behaviour identifications and the removal of behaviour identification was documented.

Of the students identified in the moderate category on May 30, 2008, only 1 student had previously had this identification removed and then had it replaced. Four students had first been identified in the moderate behaviour category, then had been identified in the intensive/serious category and then were re-identified in the moderate category. Neither of these patterns was common. Somewhat more common was the progression from being identified in the intensive/serious category to being identified in the moderate category as 29 students in Kindergarten to Grade 12 had experienced this pattern. This pattern was particularly evident for students in the upper grades of high school, as 5 students in Grade 10; 8 students in Grade 11; and 4 students in Grade 12 had exhibited this pattern.

Of the students currently identified in the intensive/serious category, only 1 student had previously had this identification removed and later had it replaced. Two students had been changed from being identified in the moderate category to being
identified in the category for students with physical and chronic health problems with a subsequent re-identification in the intensive/serious category. One student had been changed from the intensive/serious category then to the moderate category and then was changed back to the intensive/serious category and 2 other students had repeats of this pattern (moderate to intensive/serious to moderate to intensive/serious). The most common pattern of change, evident at each grade level but more common in Grades 7 to 11, was the progression from being identified in the moderate category to being identified in the intensive/serious category as 46 student had exhibited this pattern.

Overall, of the 384 students identified with E/BD on May 30, 75 (19.5%) had been changed from one behaviour category to the other. When there was a change from one category of behaviour to the other, it was more common to have changed from the moderate category to the intensive/serious category (46 students) than it was to change from the intensive/serious category to the moderate category (29 students).

Comments
1. As fewer students (29) who were first identified with E/BD in the intensive/serious category were subsequently identified in the moderate category than were first identified in the moderate category and were subsequently identified in the intensive/serious category (46), it may be that the behaviour of students with E/BD tended to worsen over time or there may have been another reason for this pattern of fluidity such as less responsiveness by the Sunnyville School District to improvements in behaviour than to declines in behaviour. It may therefore be advisable to regularly review students identified in the intensive/severe category to determine whether they would better be identified in the moderate category.

2. Of students who were identified in the moderate category after having been identified in the intensive/serious category, 17 of the 29 were in Grades 10-12. This suggests that there was a trend for some students to improve or to not have the requisite outside services work in collaboration with their schools on their behalf when they were in Grades 10-12.

4.2.7 Alternate Identification

In the Sunnyville School District, some students who were identified with E/BD were also maintained in other secondary special education categories. The most common secondary identification was as a student with a learning disability. On May 30, 2008, of the 384 students identified with E/BD, 39 (10%) were also identified as students with learning disabilities. Of the 192 students identified with E/BD in the moderate category, 8 (4.2%) were concurrently identified as students with learning disabilities, and, of the 192 students identified in the intensive/serious category, 31 (16.1%) were concurrently identified as students with learning disabilities. The secondary identification as students with learning disabilities occurred prior to behaviour identification for 16 students; concurrently for 11 students; and subsequently for 10 students. Dates of identification were not reported for 2 students who maintained this dual identification.
Three additional students who had previously been identified as students with learning disabilities had later had this identification removed.

Some students had been identified in other special education categories. On May 30, 9 students (2% of students with primary identification as students with E/BD) were also identified as students who were gifted, and an additional 2 students who had been identified as students who were gifted previously were no longer identified in the category. One student had spent a period of time identified as a student with a moderate intellectual disability before this identification had been removed. Two students had been identified as students with mild intellectual disabilities; however, both of these students later had this identification changed to identification as students with learning disabilities. Seven students, who had previously been identified as students with physical or chronic health disabilities for reasons including autism, Tourette’s disorder, encopresis, or prenatal exposure to alcohol, were no longer identified in the category for students with physical and chronic health disabilities.

Comments
1. Of students identified in the moderate category, 4.2% were also identified as students with learning disabilities, and, of students identified in the intensive/serious category, 16.1% were identified as students with learning disabilities. It is suggested that some few students with both identification as students with learning disabilities and as students with E/BD may have been primarily identified as students with learning disabilities and were therefore not included in this study.\(^{12}\) It may also have been that one difference between students identified in the moderate category and students identified in the intensive/serious category was that students identified in the intensive/serious category experienced higher rates of learning disabilities.

2. The research literature established that students with E/BD frequently have concurrent learning difficulties and learning disabilities (Cantwell & Baker, 1991; Fessler et al., 1991; Glassberg et al., 1999; Goldstein et al., 1985; Kauffman et al., 1987; Prior et al., 1999). In some U.S. based studies, from 38-75% of students identified with E/BD also had learning disabilities and from 24-52% of students with learning disabilities also had clinically significant social, emotional, or behavioural problems (M. H. Epstein, 1994; Fessler et al., 1991; Glassberg et al., 1999; Rock et al., 1997; A. A. Silver, 1984; Wright-Strawderman & Watson, 1992). In a study by Wagner et al. (2005), concurrent identification for E/BD and learning disabilities was maintained by 24.9% of the elementary/middle school students and by 29.9% of the secondary school students who were identified with E/BD. In comparison to the U.S. based research, rates for concurrent E/BD and learning disabilities identification were significantly lower in the Sunnyville School District where 8(5.2%) students in Kindergarten to Grade 7 and 24(10.5%) students in Grades 8-12 maintained secondary identification as students with learning disabilities (although some students in the Sunnyville School District may have been primarily identified under the learning disabilities designation). Further study may determine whether these

\(^{12}\) Access had not been requested for information about students with primary identification as students with learning disabilities and secondary identification as students with E/BD.
differences were the result of differences in identification criteria, processes, or practices, or because students identified with E/BD in BC were in some way(s) different from those described in the U.S. based studies. It may also have been that some students in the Sunnyville School District could have been identified with concurrent learning disabilities but had not been assessed.

3. A study by Prior et al. (1992) reported that in a clinical sample, over half of 11 and 12 year olds with E/BD had a learning disorder whereas, in a community sample, only 20% had a learning disorder. Students in the clinical sample were nearly 4 times more likely than those in the community sample to have arithmetic problems and over 3 times more likely to have spelling disabilities. As well, having learning disorders was found to be more common in students identified in the intensive/serious category. It is therefore suggested that students identified with E/BD, particularly those identified in the intensive/serious category, be screened for learning disabilities.

4. The rates of co-occurrence between learning disabilities and E/BD may depend on the particular behaviour difficulties experienced. In evidence, in the literature reviewed by Mayes and Calhoun (2006), the frequency of learning disabilities in students with ADHD ranged from 15% to 44% in reading, whereas it ranged from 31% to 60% in math, and from 60% to 65% in writing. These researchers reported that students with anxiety and/or depression experienced a learning disability rate of 18% but students with anxiety and/or depression as well as ADHD experienced a learning disability rate of 71%. This suggests that targeted assessment and intervention may be required for students with attentional difficulties/ADHD, particularly if they were identified with comorbid anxiety and/or depression. Also indicated is the need to assess these students’ reading, mathematics, and writing skills.

5. As identification as students with learning disabilities occurred prior to identification as students with E/BD for 16 students, concurrently for 11 students, and subsequently for 10 students, it could be said that behaviour and learning difficulties occur in any sequence, however definitions of learning disabilities indicate that associated learning deficits are lifelong and behaviour difficulties may occur many years prior to identification. Thus, information from this study can only surmise that in the Sunnyville School District, students with E/BD were recognized as having learning disabilities before, concurrently, and subsequently to being identified with E/BD but that their learning disabilities were more likely to be identified for special education identification purposes before their E/BD was identified.

6. In the Sunnyville School District, the rates of learning disabilities for students with E/BD were higher than the rate of approximately 3% for students with learning disabilities overall in the district. It is suggested that this higher rate of learning disabilities in students with E/BD needs to be recognized in planning academic interventions for them, particularly for those students identified in the intensive/serious category.

7. In the study by Wagner et al. (2005), 1% of the students identified with E/BD were also identified as having mental retardation; 2.5% of the elementary/middle school
students and 1.8% of secondary school students identified with E/BD maintained gifted identification. As students with mental retardation may be maintained in other categories (those for mild intellectual disabilities and for moderate intellectual disabilities), a comparison is difficult to make, however the rate for concurrent identification in the category for students who are gifted is similar to the rate reported in the Wagner et al. study, and that expected in the general population.

8. Changes in special education identification and the removal of identification for some students can occur because of different interpretations of Ministry criteria for identification; changes in Ministry criteria for identification; changes in student’s needs, changes in diagnoses; and changes resulting from student reassessments. It is therefore suggested that continued effort be placed on reviewing current student information to determine if current special education identification is appropriate for each student, or if different or additional category identification is needed.

4.2.8 Additional School System Services Received

Speech and language services had been received by 53(13.8%) of the students identified with E/BD in the Sunnyville School District. By grade grouping, 17.9% of those in Kindergarten to Grade 3; 18.2% of those in Grades 4-7, and 10.2% of those in Grades 8-12 had received speech and language services. Occupational therapy services had been received by 25(7%) of the students identified with E/BD and physical therapy services had been received by 3(1%) of the students identified with E/BD.

Comments
1. G. J. Benner et al. (2002) described 71% of children with E/BD as having language deficits in the areas of expressive, receptive, and pragmatic language. In public school samples of students with E/BD, rates of expressive language deficits were 88%; receptive language deficits were 68%, and pragmatic language deficits were 86%. As well, the American Psychiatric Association (2000) stated that expressive language disorders were a risk factor and comorbid with externalizing emotional disturbance. Nelson, Benner et al. (2005) found that in samples of Kindergarten to Grade 12 students, 68% of the students met criteria for a language deficit, particularly in the expressive area. Research by Bain (2000) also reported that individuals with an attention deficit disorder had difficulty in expressive language activities related to social competency and other behaviours. As E/BD and language disorders are closely related, it may be advisable to screen students with E/BD (particularly those with externalizing disorders and attentional issues) for concurrent language disorders.

2. The percentage of students with E/BD in the Sunnyville School District who had received any previous speech and language intervention was significantly lower than that predicted in the literature. It may therefore be advisable to consult with speech and language therapists when identifying students with E/BD, as well as when developing and implementing programs for them to determine if speech and language services are needed.
3. In the Sunnyville School District, 7-8% more students who were identified with E/BD in elementary school than were identified with E/BD in secondary school had received speech and language services at some time in their lives. This could mean that students identified with E/BD in Grades 8-12 were less likely to have underlying speech and language issues than were students identified earlier on, or that speech and language services had become more available at the elementary school level over time, or that speech and language services were considered less if a student did not exhibit E/BD in elementary school. This 7-8% difference between the two groups may need to be explored further.

4. As 25(6.5%) of the students with E/BD in the Sunnyville School District had received occupational therapy services, it is recognized that occupational therapists may need to be consulted for general and specific interventions that could be introduced into classrooms and for specific students with E/BD.

4.2.9 Cognitive Ability

Over one third of students with E/BD in the Sunnyville School District had received cognitive assessments to better understand their capabilities. Of the students with E/BD for whom this score was reported, based on their most recent cognitive information, their verbal cognitive mean fell at a standard score of 93.4(135 students); their perceptual reasoning/nonverbal cognitive mean fell at a standard score of 94.5(131 students), their processing speed mean fell at 93.3(63 students), and their working memory mean fell at 91.4(61 students). The full scale cognitive mean for the 97 students for whom this score was reported fell at a standard score of 91.6. As cognitive scores were available for a limited number of students with E/BD, differences were not calculated by grade level or by kind of disorder. The cognitive means reported for the students with E/BD who were assessed suggests that these students had a lower mean intelligence than that occurring in the general population. This profile was consistent in the four cognitive areas analyzed although the overall mean score in working memory was lower than the overall mean score reported in the other three areas.

Comments

1. The reasons some students had received psychoeducational assessments may have implications for the mean scores reported, therefore these scores may have limited applicability or comparative value. For instance, students may have been assessed when there was perceived to be a difference between their cognitive ability and their performance in school rather than when they were perceived to have below average cognitive ability and achievement.

2. The overall cognitive ability of students with E/BD in the U.S. was considered to be in the average to low average range (Kauffman & Landrum, 2009). In a series of studies, the mean full scale intelligence of students with E/BD ranged from a standard score of 88.8 in elementary school (Mattison et al., 2006), to a standard score of 87.5 in middle school (Mattison, 2004), to a standard score range from 90.3 to 99.0 in the secondary school samples (Mattison et al., 1998). Thus, it
may be that the mean cognitive level of students with E/BD in the Sunnyville School District was slightly higher than scores reported elsewhere or it may simply be that the higher scores reported in the Sunnyville School District reflected that the overall cognitive scores of students with E/BD who were assessed were higher than those of students with E/BD in the district who were not assessed. It may also be that the overall cognitive mean for students in the Sunnyville School District was different in some way from overall cognitive means for students elsewhere.

3. Some research describing the relationship between cognitive ability and delinquent behaviours indicated that lower intelligence scores were found to be a significant predictor for delinquency (Gibson & West, 1970; Hirschi & Hindelang, 1977). The reason provided was that individuals with lower intellectual ability would find it more difficult to devise alternative strategies to obtain a desired goal. Further assessment of the cognitive ability of students with delinquent disorders may reveal similar results in the Sunnyville School District. There may also be other cognitive profiles related to different diagnoses or issues that could be explored further.

4. In the study by Szatmari et al. (1990), particular cognitive weaknesses were found in the memory, processing speed, executive function, and visual motor integration abilities of students with E/BD. Further study would determine whether this held true for students with E/BD in the Sunnyville School District.

5. Research by Mattison et al. (1998) found that both students with E/BD who were and were not successful in completing high school presented with verbal intelligence scores that were lower than performance scores by 11 points or more. As a limited number of students identified with E/BD in the Sunnyville School District had received psychoeducational assessments, comparative information could not be generated. Further exploration would determine whether this was an overall pattern in the students with E/BD in the Sunnyville School District.

4.2.10 Diagnoses by Category, Current Grade Grouping, and Overall

Research studies describing prevalence and types of mental health problems in children and youth frequently make use of rating scales completed by parents, teachers, and youth. Sometimes information is obtained from school records or from clinical assessments. In this study, diagnoses and descriptions of diagnoses in this study are presented by grade grouping, overall and as a percentage of the students with E/BD who presented with the disorder or were described to have signs and symptoms of the disorder (Table 12). The diagnoses and descriptions were categorized as follows: diagnoses by a medical professional qualified to make such a diagnosis, partially diagnosed by a medical professional qualified to make such a diagnosis, and, not diagnosed but described. Diagnosed disorders were those clearly stated, somewhat diagnosed disorders were described by phrases such as “signs and symptoms of”, or “appears to meet criteria for”, and described behaviours were those referenced in
<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Diagnosed</th>
<th>Somewhat Diagnosed</th>
<th>Described</th>
<th>Kindergarten to Grade 3</th>
<th>Grades 4-7</th>
<th>Grades 8-12</th>
<th>Overall % of Overall E/BD Students</th>
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<td>Pervasive Developmental Disorder</td>
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<td>0</td>
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<td>Multiple Complex Behaviour Disorder</td>
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<td>Central Auditory Processing Disorder</td>
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<td>Dissociative Behaviour</td>
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</table>
Table 13  The Most Common Diagnoses for Students Identified with E/BD in Elementary School Compared to Students Identified with E/BD in High School (% of category)

<table>
<thead>
<tr>
<th>Kindergarten to Grade 7 (155 students)</th>
<th>Grades 8-12 (229 students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attention Deficit Disorders (32.3%)</td>
<td>1. Attention Deficit Disorders (28.4%)</td>
</tr>
<tr>
<td>2. Oppositional Defiant Disorder (16.1%)</td>
<td>2. Anxiety Disorder (22.7%)</td>
</tr>
<tr>
<td>3. Anxiety Disorder (13.5%)</td>
<td>3. Depression (17.5%)</td>
</tr>
<tr>
<td>4. Obsessive-Compulsive Disorder (7.1%)</td>
<td>4. Oppositional Defiant Disorder (12.2%)</td>
</tr>
<tr>
<td>5. Developmental Coordination Disorder (5.8%)</td>
<td>5. Drug Involvement (14.4%)</td>
</tr>
<tr>
<td>6. FASD/Neonatal Abstinence (4.5%)</td>
<td>6. Suicidal Ideation (9.2%)</td>
</tr>
<tr>
<td>7. Autistic Disorder (4.5%)</td>
<td>7. Tourette’s Disorder (7.4%)</td>
</tr>
<tr>
<td>8. Written Output Disorder (3.9%)</td>
<td>8. Separation Anxiety Disorder (6.1%)</td>
</tr>
<tr>
<td>9. Attachment Disorder (3.9%)</td>
<td>9. Alcohol Involvement (5.7%)</td>
</tr>
<tr>
<td>10. Tourette’s Disorder (3.2%)</td>
<td>10. Posttraumatic Stress Disorder (5.2%)</td>
</tr>
<tr>
<td>11. Separation Anxiety Disorder (3.2%)</td>
<td></td>
</tr>
<tr>
<td>12. Encopresis (3.2%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 12 provides a summary of the most common diagnoses for students identified with E/BD in Kindergarten to Grade 7 as compared to the most common diagnoses for those in Grades 8-12. Tables 11 and 12 show that whereas some disorders such as ADHD, anxiety disorder and oppositional defiant disorder were common for students identified with E/BD in both elementary and high school, other disorder such as depression, drug problems and suicidal ideation emerged more in high school.

Some disorders diagnosed and described in children and youth in the Sunnyville School District are compared to rates described by Waddell and Shepherd (2002), who developed overall and disorder-specific prevalence rates for child and youth mental disorders that caused significant symptoms and significant impairment in BC. Wadell and Shepherd based their prevalence percentages for children and youth in BC on a study review of epidemiological research on the prevalence of child and youth mental disorders.

**Attention Deficit Disorder**

In the Sunnyville School District, 115 (29.9%) of the students who were identified with E/BD on May 30, 2008 had also been identified as having or as likely to have had an attention deficit disorder at some time in their lives (Table 12). As attention problems are frequently comorbid with antisocial or externalizing behaviour problems (Angold et al., 1999; Hinshaw, 1992; Wehby, Falk et al., 2003; Willcut & Pennington, 2000) it is not surprising that the rates of attention disorders in the students with E/BD in the Sunnyville School District were higher than for any other disorder. Based on the expected prevalence rates reported by Waddell and Shepherd (2002), 3.3% of children and youth would be predicted to have an attention-deficit/hyperactivity disorder. As there were 15,113 school age students enrolled in the Sunnyville School District on September 30,
2007\textsuperscript{13}, 499 students would be expected to be diagnosed with an attention deficit disorder on that date. Thus, based on information collected on May 30, approximately 22.6\% of students expected to be diagnosed with an attention deficit disorder were identified with E/BD\textsuperscript{14}.

In a U.S. study by Garland et al. (2001) reported that 65.6\% of students receiving public school services for youths with serious emotional disturbance (SED) in San Diego, California presented with ADHD (Garland et al., 2001), a rate more than double the 29.9\% of students identified in the Sunnyville School District E/BD population.

Students with attentional difficulties often have impaired relationships with others, lower competence in extra-curricular activities, and lower school performance (Szatmari, Offord, & Boyle, 1989). Kavenagh (1994) reported that 25-50\% of students with attention disorders experienced academic failure. As Knivesber and Andreassen (2008) found that 40\% of students with E/BD and dyslexia experienced attention problems, this group of students may be particularly at risk for school noncompletion and may need additional support to maintain them in school.

\textbf{Anxiety Disorder and Separation Anxiety Disorder}

In the Sunnyville School District, 66(18.1\%) of the students who were identified with E/BD on May 30, 2008 had been diagnosed with, or had been described to have had the characteristics of an anxiety disorder, 12 students had been diagnosed with, or had been described to have had the characteristics of a separation anxiety disorder, and an additional 7 students had been diagnosed with, or had been described to have had the characteristics of both (Table 12). Based on the expected prevalence rates reported by Waddell and Shepherd (2002), 6.5\% of children and youth would be predicted to present with an anxiety disorder. As there were 15,113 school age students enrolled in the Sunnyville School District on September 30, 2007, 982 students would be expected to be diagnosed with an attention deficit disorder on that date. The 85 students who had been identified with some form of anxiety disorder represented 0.56\% of the 155,113 school age students in the Sunnyville School District identified to the Ministry of Education on September 30, 2007, and 22.1\% of students identified with E/BD in the district, assuming that overall attendance in the district remained stable from September 30 to May 30. Of adolescents between ages 14 and 24, Wittchen et al. (1998) identified 14\% of as experiencing anxiety disorders. Thus, based on the percentage identified by Wittchen et al., approximately 1000 students in high school alone could be predicted to experience anxiety disorders. This is compared to the 61 students identified with E/BD in Grades 8-12 who had been identified at some time with some form of anxiety disorder or anxious behaviour at some time in their lives. As students with anxiety disorders were described to experience educational underachievement, low-self esteem, loneliness, and

\textsuperscript{13} The number of school age students (15,113) identified to the Ministry of Education for the Sunnyville School District for the 2007-08 school year is used for comparison rather than the total number of students (15,358).

\textsuperscript{14} Total school age enrolment in the Sunnyville School District on May 30, 2008 was not made available to the researcher; however, for the purposes of this calculation, it is assumed that total enrolment numbers remained stable.
physical health problems (Dorn et al., 2003; Livingston et al., 1988; Strauss et al., 1987; Van Ameringen et al., 2003), students identified with E/BD who had also been identified with anxiety in the Sunnyville School District may require specific interventions to address one or more of these issues.

**Oppositional Defiant /Conduct/Disruptive Behaviour Disorders**

In the Sunnyville School District, 53(13.8%) of the students who were identified with E/BD on May 30, 2008 had been diagnosed with, or had been described to have had the characteristics of an oppositional defiant disorder; 7(1.8%) of the students who were identified with E/BD on May 30, 2008 had been diagnosed with or had been described to have had a conduct disorder and 2(3.6%) of the students who were identified with E/BD on that date had been diagnosed with or had been described to have had a disruptive behaviour disorder in addition to having been diagnosed with or described to have had an oppositional defiant disorder at some time in their lives (Table 12). In total, 60(15.6%) of the students who were identified with E/BD in the Sunnyville School District on May 30, 2008 had the characteristics of an oppositional or conduct or disruptive behaviour disorder. Based on the expected prevalence rate reported by Waddell and Shepherd (2002), 3.3% of children and youth would be predicted to have a conduct disorder that affected them and caused them significant symptoms and significant impairment. As Waddell and Shepherd did not report separate information for students with oppositional defiant disorder or disruptive behaviour disorder, it is not known if the 3.3% prevalence rate expected for conduct disorder includes other conduct type disorders. The 13.8% of students identified as having or having had a conduct type disorder and the 1.8% of the students identified as having or having had a conduct disorder in the Sunnyville School District on May 30, 2008 is compared to the 22.6% of students identified with an oppositional disorder in a U.S. based special education sample (Garland et al., 2001).

**Depression and Dysthymia**

In the Sunnyville School District, 41(10.7%) of the students identified with E/BD on May 30, 2008 had been diagnosed with, or had been described to have had clinical depression; 4(1.0%) of the students had been diagnosed with, or had been described to have had dysthymia disorder and 1 (0.26%) of the students had been diagnosed or had been described to have had both (Table 12). In total, 44(11.5%) of the students identified with E/BD had been diagnosed with or were described to have had a depression type disorder at some time in their lives (Table 12). Based on the expected prevalence rate reported by Waddell and Shepherd (2002), 2.1% of children and youth would be predicted to have had a depressive disorder that affected them and caused them to have significant symptoms and significant impairment. As there were 15,113 school age students enrolled in the Sunnyville School District on September 30, 2007, 317 students would be expected to have experienced this level of impairment because of depression on that date suggesting that 12.9% of students expected to have a depressive disorder were identified with E/BD. The literature indicated that rates for depression rose in high school age individuals (Dubow, Loyko, & Kausch, 1990). In the
Sunnyville School District, 40 out of 41 students who had been diagnosed with, or had been described to have had the characteristics of depression or dysthymia at some time in their lives were in high school (Table 12).

In a study by Stephens et al. (1999) of Canadian youth aged 12-19, 6% of males and 4% of females self-reported that they were depressed. In a study by S. Tremblay et al. (2003), close to 6% of females aged 12-14 had experienced a major depressive episode; in 15-17 year old individuals, this rate rose to 11% for females while the rate for males remained consistent at 2%. Of the 44 students identified with E/BD in the Sunnyville School District who were reported to have been diagnosed with, or to have had the characteristics of depression and/or dysthymia at some time in their lives, 21 were male and 23 were female. This suggests a somewhat even identification by gender, a finding that differs significantly from that reported by S. Tremblay.

**Drug and Alcohol Problems**

In the Sunnyville School District, 32(8.3%) of the students who were identified with E/BD on May 30, 2008 had been described to have had a problem with drugs and 14(3.6%) of students identified on that date had ever been described to have had a problem with alcohol (Table 12). Of these students, 7(1.8%) were identified with both problems. Thus, a total of 39(10.2%) of the students identified with E/BD were described to ever have had a substance abuse problem.\(^{15}\) Waddell and Shepherd (2002) predicted that 0.8% of children and youth would have substance use disorders. As there were 15,113 school ages students enrolled in the Sunnyville School District on September 30, 2007, approximately 122 students in the Sunnyville School District would be predicted to have a substance disorder that caused them significant symptoms and significant impairment on that date.

**Suicidal Ideation**

The one year rate of suicidal ideation for students in Grades 7-12 in BC as identified in the McCreary Report (2003) was 6%, and the percentage of students who had planned a suicide was 11%. As well, 10% of females and 4% of males had attempted suicide. As only 24(6.3%) of the students who were identified with E/BD in the Sunnyville School District on May 30, 2008, were identified as ever having presented with suicidal ideation (Table 12), it is suggested that very few of these individuals were identified with E/BD in the school district or that suicidal ideation was not necessarily documented.

**Tourette’s Disorder**

In the Sunnyville School District, there were 20(5.2%) of the students who were identified with E/BD on May 30, 2008 who had been diagnosed with Tourette’s disorder and 2(0.5%) of the students for whom this diagnosis was identified as probable as of this date (Table 12). According to Waddell and Shepherd (2002), Tourette’s disorder is

\(^{15}\) It is also recognized that having been identified with a drug or alcohol problem did not mean that the student met criteria for a diagnosis of a drug or alcohol related disorder.
expected to have an expected prevalence rate of 0.1% in children and youth such that it causes significant symptoms and significant impairment. As there were 15,113 school age students enrolled in the Sunnyville School District on September 30, 2007, the suggested prevalence of Tourette’s disorder would be 15 students in the entire Sunnyville School District. It is therefore suggested that the prevalence of this disorder was much higher in the Sunnyville School District than was predicted by Wadell and Shepherd or that students identified as having Tourette’s disorder in the Sunnyville School District may not have experienced significant symptoms and/or impairment from this disorder such that they would be reflected in prevalence studies.

**Obsessive-Compulsive Disorder**

Waddell and Shepherd (2002) predicted that 0.2% of children and youth would experience obsessive-compulsive disorders that caused them significant symptoms and significant impairment. Using these rates, approximately 31 students in the Sunnyville School District would be predicted to have an obsessive-compulsive disorder. In the district, of students identified with E/BD on May 30, 2008, there were 21 (67.7%) of the students predicted to have the characteristics of an obsessive-compulsive disorder who had been identified with E/BD.

Comorbidity rates for students with some disorders that commonly occur together in children and youth were analyzed for the Sunnyville students identified with E/BD.

**Comorbidity with Attentional Disorders**

Research described children and youth with comorbid hyperactivity-impulsivity-inattention issues and conduct problems such as fighting, stealing, truancy, noncompliance, and arguing; some children and youth were also described to have other antisocial and delinquent behaviours (Gresham et al., 2000). In the Sunnyville School District, 5 (1.3%) of the students who had been identified with E/BD on May 30, 2008, had also been identified with comorbid attention and conduct disorders or behaviours and 37 (9.6%) of students identified with E/BD on that date had been identified with comorbid attention and oppositional disorders or behaviours. In a metastudy by Biederman et al. (1991), ADHD and conduct disorder were comorbid for 30-50% of individuals, whereas, in the Sunnyville School District, attention disorders and conduct disorder were comorbid for only 4% of the E/BD population. The Biederman et al. study noted that ADHD and oppositional disorders were comorbid for at least 35% of the population. In the Sunnyville School District, 37 (32%) of students with attentional issues also had been diagnosed with or had been described to have had the characteristics of an oppositional disorder, thus this was a percentage quite consistent with that presented in the Biederman study. In a study by Chavira et al (2008), attention issues were found to be comorbid with conduct/oppositional behaviours for 35.7% of the population studied. Based on the Chavira et al. study, the Sunnyville School District had a lower percentage of students identified with E/BD who were identified with both a diagnosed or described attention disorder as well as a diagnosed or described conduct disorder. The percentage of students identified with E/BD who had been diagnosed with...
or had been described to have had both attention and opposition issues was consistent with the rate for disorders described in the literature.

**Comorbidity between Attentional Disorders and Anxiety**

In the Sunnyville School District, 32(28%) of the 115 students with E/BD who had been identified to have had attention issues (diagnosed or described) had also been identified to have had an anxiety disorder (diagnosed or described).

**Comorbidity between Attentional Disorders and Depression**

In the Sunnyville School District 13(11%) of the 115 students with E/BD who had been identified to have had attention issues (diagnosed or described) had also been identified to have had depression and/or dysthymia (diagnosed or described).

**Comorbidity between Anxiety and Depression**

A study by Chavira et al. (2008) found that 26% of individuals with an anxiety disorder had a coexisting mood disorder. In the Sunnyville School District, 19(22%) of the 85 students who were identified with E/BD and had been diagnosed with or had been described to have had an anxiety and/or a separation anxiety disorder had also been diagnosed with or were described to have had depression or dysthymia. This suggests a concurrence with the study by Chaviera et al.

**Comorbidity between Conduct/Oppositional Behaviours and Anxiety**

Garland et al. (2006) reported that 62.4% of individuals with an anxiety disorder also had a comorbid disruptive behaviour disorder. In the Sunnyville School District, 1 student had been diagnosed with, or had been described to have had both an anxiety/separation anxiety disorder and a conduct disorder. As well, 8 students who had been diagnosed with, or had been described to have had an anxiety disorder had also been diagnosed with or had been described to have had an oppositional defiant disorder. As these rates of comorbidity in the Sunnyville School District were lower than those suggested in the literature, some students in the Sunnyville School Districts identified with E/BD who had been identified with one or the other disorder may not have been recognized as having both disorders.

**Comorbidity between Conduct/Oppositional Disorders and Depression/Dysthymia**

Of students identified with E/BD who had depression or dysthymia (diagnosed or described) in the Sunnyville district, 2 also had a conduct disorder (diagnosed or described) and 3 also had an oppositional defiant disorder (diagnosed or described).

In the Sunnyville School District, the most common cumulative disorders diagnosed or described for students identified with E/BD in Grades 8-12 differed somewhat from those diagnosed or described for students in Kindergarten to Grade 7 (Table 13). The most common disorders diagnosed or described at all grade levels were ADHD, oppositional defiant disorder, and anxiety disorder (Table 12). Depression ranked fourth in Grades 8-12 but it ranked much lower for the students in Kindergarten.
to Grade 7 (Table 13). Some problems, such as drug problems and suicidal ideation emerged in high school. Other disorders such as developmental coordination disorder were more commonly described for students with E/BD in Kindergarten to Grade 7 (Table 13).

**Comments**

1. As some diagnoses were more commonly diagnosed or described for students with E/BD in all grades, and some disorders were more commonly diagnosed or described for students with E/BD in Grade 8-12, further study could be undertaken to determine whether the students with the disorders or difficulties that emerged in high school were identified in earlier grades as students with other behaviours or diagnoses or whether students with these later emerging difficulties were unrecognized as having significant E/BD issues in earlier grades.

### 4.2.11 Behaviours Described by Current Grade Grouping and Overall

One way to understand the challenges experienced by students with E/BD in the Sunnyville School District was to examine the students’ behaviours as described by those who worked with them. This information, presented in Table 14 reflects cumulative information obtained from the students’ files rather than current behaviour histories as file information did not always discriminate between current behaviour and historic behaviour. The described behaviours provide an understanding of the behaviours that interfered with learning. While some behaviours may have been ongoing (e.g., poor socialization), others may have been isolated but significant in nature (e.g., fire starting). Some behaviours were more commonly described for students in the primary grades (hitting); some were more commonly described for students in Grades 4-7 (impulsive behaviours); and some were more commonly described for students in Grades 8-12 (truancy; fighting/assault noncompliance/rule breaking/disobedience; defiance; sexualized behaviours; theft/stealing; bullying/harassment; fire starting; cutting; and doesn’t get things done/work refusal). Still other behaviours were evident in each grade grouping (verbal aggression; physical aggression; poor socialization; off task/short attention span/hyperactive). Overall, aggression of a verbal and physical nature was described most often, followed by truancy and noncompliance.

**Comments**

1. Further study of students’ school held information may provide more information about the presentation of student behaviours by grade level to help refine the information provided in this table.
2. It may be useful to target system wide interventions for behaviours of most concern at specific grades or grade groupings at school, at home, and in the community.
<table>
<thead>
<tr>
<th>Descriptions of behaviour</th>
<th>K-Grade 3</th>
<th>Grades 4-7</th>
<th>Grades 8-12</th>
<th>Overall</th>
<th>Overall %</th>
</tr>
</thead>
<tbody>
<tr>
<td>verbal aggression (swearing, threatening, yelling, arguing)</td>
<td>10</td>
<td>16</td>
<td>28</td>
<td>54</td>
<td>14.1</td>
</tr>
<tr>
<td>physical aggression, physically showing anger</td>
<td>13</td>
<td>18</td>
<td>20</td>
<td>51</td>
<td>13.3</td>
</tr>
<tr>
<td>truancy</td>
<td>0</td>
<td>4</td>
<td>45</td>
<td>49</td>
<td>12.8</td>
</tr>
<tr>
<td>non compliance, rule breaking, disobedience, defiance</td>
<td>3</td>
<td>6</td>
<td>21</td>
<td>30</td>
<td>7.8</td>
</tr>
<tr>
<td>fighting/assault</td>
<td>1</td>
<td>2</td>
<td>23</td>
<td>26</td>
<td>6.8</td>
</tr>
<tr>
<td>poor socialization, isolated</td>
<td>8</td>
<td>5</td>
<td>13</td>
<td>26</td>
<td>6.8</td>
</tr>
<tr>
<td>off task, short attention span, hyperactive</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>23</td>
<td>6.0</td>
</tr>
<tr>
<td>sexualized behaviours (e.g., inappropriate drawings)</td>
<td>1</td>
<td>5</td>
<td>16</td>
<td>22</td>
<td>5.7</td>
</tr>
<tr>
<td>hitting</td>
<td>12</td>
<td>6</td>
<td>3</td>
<td>21</td>
<td>5.5</td>
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<tr>
<td>impulsive behaviours</td>
<td>7</td>
<td>9</td>
<td>2</td>
<td>18</td>
<td>4.7</td>
</tr>
<tr>
<td>theft/stealing</td>
<td>1</td>
<td>1</td>
<td>15</td>
<td>17</td>
<td>4.4</td>
</tr>
<tr>
<td>bullying, harassment</td>
<td>1</td>
<td>3</td>
<td>12</td>
<td>16</td>
<td>4.2</td>
</tr>
<tr>
<td>throwing things</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>15</td>
<td>3.9</td>
</tr>
<tr>
<td>disruptive behaviour</td>
<td>2</td>
<td>3</td>
<td>9</td>
<td>14</td>
<td>3.6</td>
</tr>
<tr>
<td>fire starting</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>12</td>
<td>3.1</td>
</tr>
<tr>
<td>cutting of self</td>
<td>0</td>
<td>1</td>
<td>11</td>
<td>12</td>
<td>3.1</td>
</tr>
<tr>
<td>doesn’t get work done, work refusal</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>12</td>
<td>3.1</td>
</tr>
<tr>
<td>kicking</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>11</td>
<td>2.9</td>
</tr>
<tr>
<td>poor fine motor skills</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>11</td>
<td>2.9</td>
</tr>
<tr>
<td>tantrums</td>
<td>0</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>2.6</td>
</tr>
<tr>
<td>sensory issues</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>9</td>
<td>2.3</td>
</tr>
<tr>
<td>poor gross motor skills</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>9</td>
<td>2.3</td>
</tr>
<tr>
<td>moody, emotional</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td>2.3</td>
</tr>
<tr>
<td>vandalism (e.g., fire alarm pulling)</td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>8</td>
<td>2.1</td>
</tr>
<tr>
<td>poor organization</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td>2.1</td>
</tr>
<tr>
<td>pushing</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>1.8</td>
</tr>
<tr>
<td>homicidality</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>7</td>
<td>1.8</td>
</tr>
<tr>
<td>afraid of situations, fearful</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>1.6</td>
</tr>
<tr>
<td>spitting</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>1.3</td>
</tr>
<tr>
<td>grabbing</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>self-injurious behaviours</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>weapons (e.g., knives)</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>bolting, running away</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>creating graffiti</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>social and personal boundary issues</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>lying</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>hallucinations</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>biting</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>poor eye contact</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>crying</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>disrespectful</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>headaches/stomach aches</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>perseverative behaviour</td>
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<td>2</td>
<td>1</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>diarrhoea</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0.5</td>
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<tr>
<td>pinching</td>
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<td>0</td>
<td>0</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>vomiting</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0.3</td>
</tr>
</tbody>
</table>


4.2.12 Students in French Immersion Programs

In the Sunnyville School District, 1440 students were reported to the Ministry of Education as students in French Immersion programs on September 30, 2007. On May 30, 2008, of students identified with E/BD, there were only 3 students in Kindergarten to Grade 3, 1 student in Grades 4-7, and 1 student in high school who were enrolled in this choice program. Two additional students had previously been enrolled in French Immersion programs.

Comments

1. It is unknown why students identified with E/BD were not commonly enrolled in French Immersion programs.

4.2.13 Students in Alternate Schools

In the Sunnyville School District, 271 (3.83%) of the 7074 students in Grades 8-12 attended the district’s 2 alternate schools as reported to the Ministry of Education on September 30, 2007. This was an increase from the 186 students who had attended alternate schools in the 2003-04 school year. By May 30, 2008, 56 of the high school students in the alternate schools on that date were identified with E/BD (Table 15); 22 in the moderate category and 33 in the intensive/serious category. Fewer students identified with E/BD attended alternate schools in Grade 8, probably because only 1 of the 2 alternate schools accepted students in that grade.

Table 15  Moderate, Intensive/Serious and Overall Numbers of Students Identified with E/BD in Alternate Schools on May 30, 2008

<table>
<thead>
<tr>
<th></th>
<th>Moderate</th>
<th>Intensive /Serious</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 8</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Grade 9</td>
<td>4</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Grade 10</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Grade 11</td>
<td>7</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Grade 12</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>34</td>
<td>56</td>
</tr>
</tbody>
</table>

Comments

1. In the U.S., Wagner et al. (2006) noted that 7 out of 10 students classified with E/BD attended general education schools in their neighbourhoods and that elementary school students with E/BD were less likely to attend neighbourhood schools. As all elementary students in the Sunnyville School District attended neighbourhood schools, this placement difference may have affected grade-to-grade transition rates and successful graduation from high school in the U.S., as education may have been delivered differently in these separate settings.

2. Reasons for the increase in the number of high school students who attended alternate schools in the Sunnyville School District from the 2003-04 school year to
the 2007-08 school year are not known. It may be that more students identified with E/BD did not drop out of school but instead attended the district’s two alternate schools or that more students attended alternate schools for some other reason such as program flexibility, or that the hours the programs were open were preferable, or that students who attended alternate schools stayed in school longer, or that students stayed in the alternate settings longer. Determining why students with E/BD, particularly those in Grades 9-11, attended the alternate schools may provide insight as to how inclusive neighbourhood high schools could better accommodate students with E/BD.

3. Reasons that fewer students with E/BD attended alternate schools in Grade 12 are not known. It could be that students with E/BD had dropped out of the alternate schools before entering Grade 12, or that fewer students needed identification as students with E/BD in Grade 12 because of mental health and behaviour improvements, or that students who had been in alternate schools and who continued on to Grade 12 returned to the regular schools because of reasons such as course availability.

4.2.14 The Home Caregivers by Category and Current Grade Grouping

In the Sunnyville School District, current caregiver information was available for 379 (98.7%) of the 384 students identified with E/BD (Table 16). In the district, 95 (49.5%0) of students identified with E/BD in the moderate category and 62 (32.3%) of students identified in the intensive/serious category lived with two parents or with a stepparent/parent combination. Of students identified with E/BD in the moderate category, 71 (37.0%) lived with a single parent or alternated between parents, and of students identified in the intensive/serious category, 68 (35.4%) lived with a single parent or alternated between parents. In the district, 13 (6.8%) of the students identified in the moderate category and 41 (21.4%) of the students identified in the intense/serious category were living “in care” on May 30, 2008. An additional 1 student in the moderate

<table>
<thead>
<tr>
<th>Current Home Situation</th>
<th>Moderate (188/192 reported)</th>
<th>Intensive/Serious (191/192 reported)</th>
<th>Overall 379/384 reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both Parents</td>
<td>77 (40.1%)</td>
<td>54 (28.1%)</td>
<td>131 (34.1%)</td>
</tr>
<tr>
<td>Stepparent/Parent</td>
<td>18 (9.4%)</td>
<td>8 (4.2%)</td>
<td>26 (6.8%)</td>
</tr>
<tr>
<td>Mother Only</td>
<td>56 (29.2%)</td>
<td>56 (29.2%)</td>
<td>112 (29.2%)</td>
</tr>
<tr>
<td>Father Only</td>
<td>13 (6.8%)</td>
<td>9 (4.7%)</td>
<td>22 (5.7%)</td>
</tr>
<tr>
<td>Alternating Parent Care</td>
<td>2 (1.0%)</td>
<td>3 (1.6%)</td>
<td>5 (1.3%)</td>
</tr>
<tr>
<td>Grandparent Care</td>
<td>8 (4.2%)</td>
<td>17 (8.9%)</td>
<td>25 (6.5%)</td>
</tr>
<tr>
<td>Other Relative Care</td>
<td>0 (0.0%)</td>
<td>1 (0.5%)</td>
<td>1 (0.3%)</td>
</tr>
<tr>
<td>“In Care” Not Relatives</td>
<td>13 (6.8%)</td>
<td>41 (21.4%)</td>
<td>54 (14.1%)</td>
</tr>
<tr>
<td>Temporary/Transitory*</td>
<td>1 (0.5%)</td>
<td>2 (1.0%)</td>
<td>3 (0.8%)</td>
</tr>
</tbody>
</table>

*Includes shelters and safe houses.
category and 8 students in the intensive/serious category who had once lived “in care” no longer lived “in care”. In total, of all students identified with E/BD on May 30 in the district, 66 had lived “in care”. Grandparents were also caregivers for students identified with E/BD. They were the guardians for 8(4.2%) of the students identified in the moderate category and 17(8.9%) of the students in the intensive/serious category. An additional 2 students identified in the moderate category and 4 students in the intensive/serious category were reported to have lived with grandparents at one time in their lives. In all, 31 students with E/BD had lived in the care of their grandparents.

Comments
1. The 40.9% of students identified with E/BD in the Sunnyville School District who lived with two parents including stepparent combinations is compared to:
   - the 48.7% of children and youth aged 8-18 identified with E/BD who lived with two parents in the U.S. based study by S. Silver et al. (1992);
   - the 68% of students in Grades 7-12 in BC who reported that they lived with two parents (The McCreary Centre Society, 2003);
   - the 84.1% of all children in Canada who were reported in the 2006 census to live with married couple or with common-law couples; and
   - the 70.7% of children younger than 18 in the U.S. reported to live with married or unmarried parents (U.S. Bureau of the Census, 2008).

Information from the Sunnyville School District suggests that the 49.5% of students identified with E/BD in the moderate category who lived with two parents or stepparents would be similar to profiles from the U.S., however, the 32.3% of students identified in the intensive/serious E/BD category in the district who lived with two parents or stepparents represents a lower proportion of two parent families in this population in comparison to the U.S. sample. It is suggested that implications of not living in two parent households need to be recognized by the Sunnyville School District when considering roles that parents or other caregivers of students with E/BD take in their care.

2. The 34.9% of students identified with E/BD in the Sunnyville School District who lived with a mother or father only is compared with the 35.4% of elementary and middle school students with E/BD and the 38.1% of secondary students with E/BD who lived with a mother or father only as described in the U.S. sample (Wagner et al., 2005). In contrast, Statistics Canada (2006) reported that 15.9% of children in Canada lived with one parent only. It appears that students with E/BD, both in Sunnyville and in the U.S., were twice as likely to come from one-parent homes as students overall. Implications of living in one parent homes (such as possible poverty and/or time constraints) need to be considered when planning interventions for students with E/BD in the Sunnyville School District.

3. At any one point in time, 1% of students in BC were described to live “in care” and, over the course of a year, 1.5% of 0-18 year olds in the province were described to live “in care” (BC Office of the Provincial Health Officer, 2006). The percentage of students in Grades 7-12 who lived “in care” at some time during the previous year was reported to be higher, at 2% (A. Smith et al., 2009).
Sunnyville School District data indicates that students identified in the moderate E/BD category were 6.8 times as likely as children and youth overall in BC to live “in care” whereas students identified in the intensive/serious category were 21.4 times more likely than children overall in BC to live “in care”. This finding is significant as children “in care” were recognized in the literature to often have gaps in their learning and difficulties in adjusting to changes in homes, schools, and communities. It is suggested that this population needs to be studied further to determine interventions to address both their learning and adjustment needs.

4. There were 25 students in the Sunnyville School District who lived with one or more grandparents, however little research was located on students with E/BD who lived with grandparents. These children and youth were being raised by grandparents who may already have completed caregiving duties with the parents of these children and youth who were no longer able to care for them. The grandparents who were providing care for these children and youth with E/BD may have been experiencing the multigenerational issues described in the literature, as the literature described the tendency for mental health and behaviour issues to be intergenerational from genetic disposition and from similar environments (Capaldi & Patterson, 1991; Dulmus & Rapp-Paglicci, 2000). These grandparents may also have been experiencing caregiver strain from both objective burden (e.g., providing transportation or assisting with daily tasks) and subjective burden (e.g., worry) for their grandchild or grandchildren as well as caregiver strain as a result of caring for their own children who are the parents who relinquished caregiving duties for the grandchildren. It may therefore be beneficial for the Sunnyville School District to collaborate with community service providers and these families in order to determine what support systems could be put in place for them. Supports could include ways to connect these grandparents with other parents, grandparents, and systems to help them provide care for their grandchildren.

4.2.15 The Extremes in Home Placements and Number of School Placements

In the Sunnyville School District, some few students with E/BD were identified as having experienced high numbers of home situations and/or high numbers of schools attended. In evidence, 11 students in Kindergarten to Grade 12 who had been identified with E/BD in the Sunnyville School District had experienced 4 or more home placements and 4 of these students currently resided “in care”. Three other students in Kindergarten to Grade 7 were described as having experienced multiple placements “in care”. There were 5 students in Kindergarten to Grade 7 who had experienced 4 or more home situations. One student in Kindergarten had experienced 5 placements “in care”. The other 4 students had experienced different combinations of caregivers that included parents, stepparents, grandparents, aunts, uncles, and placements “in care”. Of the 6 students in Grades 8-12 who were identified with E/BD who had experienced 4 or more home placements, each was identified in the intensive/serious category. These students were in the following grades: 3 in Grade 9; 2 in Grade 10; and 1 in Grade 11. Four of
the 6 high school students who had experienced 4 or more home placements had lived in homes with different family combinations of parents, step-parents, grandparents, aunts, and uncles. Two of the students had alternated between homes while the other 4 had each experienced living in 4 different homes. In Grades 8-12, 1 student had experienced 7 placements “in care” between birth and age 5 and another had experienced at least 14 placements “in care”.

Some students identified with E/BD had attended numerous schools (Table 17). In Kindergarten to Grade 3, 8 students identified with E/BD had attended 2 or more schools. In Grades 4-7, 12 students had attended 3 or more schools. One student in Grade 5 had changed schools 11 times. For students in Grades 8-12, Table 17 provides information about the 26 students identified with E/BD who had attended 5 or more schools.

<table>
<thead>
<tr>
<th>Number of Schools Attended</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 8</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grade 9</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Grade 10</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grade 11</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grade 12</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>10</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Comments**

1. Table 17 shows that fewer students in Grades 11-12 had attended 5 or more schools than had students in Grades 8-10, which possibly suggests that students who had attended numerous schools were less likely to stay in school long enough to be enrolled in Grade 11 or 12.

2. As family mobility when children were young was found to increase early school leaving (Haveman et al., 1991), it may be prudent to monitor and provide additional support for children who experienced high family mobility and school changes in the primary grades.

3. The Sunnyville School District may wish to continue collaborating with caregivers and the Ministry of Children and Family Development to discuss the possible impact of children and youth "in care" changing home and school placements frequently, as well as to find ways to have children and youth with E/BD be maintained in consistent caregiving arrangements with reduced school mobility.
4.2.16 The Impact of Poverty

The First Call (2009) reported that BC had the highest rate of children in poverty in Canada, and that approximately half of children living in poverty lived in single parent homes headed by females (First Call, 2009). As approximately one third of students with E/BD in the Sunnyville School District lived in single parent households, and as The First Call and others had reported that single parent households were disproportionately poor, and as students from lower socioeconomic status families were found to have higher rates of mental health disorders and behaviour problems (Coleman & Vaughn, 2000) as well as lower school performance (Ainsworth, 2002), it is likely that many of the students identified with E/BD in the Sunnyville School District were impacted by family poverty which, in turn, helps to explain why they did not do so well in school.

Although a number of elementary schools in the Sunnyville School District had been identified as having lower socioeconomic catchment areas, no high school was identified as having a lower socioeconomic catchment area, and many students in Grades 8-12 attended schools outside of their catchment areas. In this study, postal codes were collected for each student so that information about the socioeconomic status of individuals in neighbourhoods could be compared to the prevalence of students identified with E/BD in the neighbourhoods at a later date.

Comments

1. Although the relationship between single parent households; socioeconomic indicators; mental health and behaviour disorders; and lower school performance was not established by using students’ postal codes and relating them to the data collected in this study, determining if and how poverty impacted students with E/BD through other research means may be beneficial. This information would help to develop interventions for students impacted by poverty.

2. While the impact of being poor or of living in low socioeconomic status neighborhoods is recognized but was not analyzed, the fact that so many students identified with E/BD in the Sunnyville School District lived in single parent households suggests that low socioeconomic status/poverty was an issue for many of these students. For this reason, schools need to be vigilant to identify families living in persistent poverty to provide for them or identify them for additional support. These parents may be experiencing increased stress, frustration, depression, and powerlessness, which may be affecting the successful.

4.2.17 The Outside Services Received

The 384 students identified with E/BD in the Sunnyville School District had received support services in school from their school administrators, classroom teachers, school counsellors, and paraprofessionals including teacher’s assistants, aboriginal support services, and child care workers. Some students had also received additional support from school district level persons including school psychologists;
speech and language therapists; physiotherapists; district school counsellors; and occupational therapists. Many students who were identified with E/BD in the moderate category and all students who had been identified with E/BD in the intensive/serious category had received additional support from community service providers including services from other government ministries, community agencies, hospitals, and private service providers. Table 18 provides information about the service providers who supported students with E/BD in the Sunnyville School District by grade grouping, by overall number, and by the percentage of students with E/BD who had received services from the service provider. The most common service provider was the Ministry of Children and Family Development. Of students with E/BD in the Sunnyville School District, 105(27.3%) had been served by a Ministry of Children and Family Development Social Worker and 102(26.6%) had been served by a Child and Youth Mental Health therapist; 22 of these students had been served by both, meaning that 185 out of the 384 students (48.2%) had been directly served by this ministry. The next most common professional to serve students with E/BD was a paediatrician followed by services provided at BC Children’s Hospital in Vancouver.

Comments.

1. Whereas it might be assumed that students identified with E/BD in Grades 8-12 would have received more services as they were older and had more years in which to be served, this was not necessarily the case. A social worker had been seen by 39(25.2%) of the 155 students identified with E/BD on May 30 who were in Kindergarten to Grade 7 and by 66(28.8%) of the students in Grades 8-12 who were identified with E/BD on that date. A mental health therapist had been seen by 43(27.7%) of the students in Kindergarten to Grade 7 who were identified with E/BD on May 30, and by 59(25.8%) of those in Grades 8-12. This means that it was somewhat more likely for a student with E/BD in Kindergarten to Grade 7 to have been served by a mental health therapist than a social worker, whereas, the converse was true for students in Grades 8-12. There was a more significant difference between the 57(36.8%) of students with E/BD in Kindergarten to Grade 7 who had received service from a pediatrician compared to the 45(19.7%) of students in Grades 8-12 identified with E/BD who had received service from this professional. BC Children’s Hospital had been accessed by 42(27.1%) of the students in Kindergarten to Grade 7 who were identified with E/BD as compared to 58(25.3%) of the students who were identified with E/BD in Grades 8-12 who had accessed services at this hospital. Reasons for these patterns are not known but they could be related to differences between the students identified in elementary school as compared to the students identified in high school or they could reflect the differences in service provision by age or differences in availability of services over time.
<table>
<thead>
<tr>
<th>SERVICE PROVIDERS</th>
<th>K-Grade 3</th>
<th>Grades 4-7</th>
<th>Grades 8-12</th>
<th>Overall</th>
<th>% of Students with E/BD Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Children and Family Development Social Worker</td>
<td>14</td>
<td>25</td>
<td>66</td>
<td>105</td>
<td>27.3</td>
</tr>
<tr>
<td>Ministry of Children and Family Development Mental Health Therapist</td>
<td>9</td>
<td>34</td>
<td>59</td>
<td>102</td>
<td>26.6</td>
</tr>
<tr>
<td>Pediatricist</td>
<td>28</td>
<td>29</td>
<td>45</td>
<td>102</td>
<td>26.6</td>
</tr>
<tr>
<td>BC Children’s Hospital</td>
<td>12</td>
<td>30</td>
<td>58</td>
<td>100</td>
<td>26.0</td>
</tr>
<tr>
<td>Speech and Language Services</td>
<td>10</td>
<td>18</td>
<td>25</td>
<td>53</td>
<td>13.8</td>
</tr>
<tr>
<td>Psychologist (Private/Hospital/Community Service)</td>
<td>8</td>
<td>11</td>
<td>23</td>
<td>42</td>
<td>10.9</td>
</tr>
<tr>
<td>Child and Family Services Society 16</td>
<td>6</td>
<td>10</td>
<td>22</td>
<td>38</td>
<td>9.9</td>
</tr>
<tr>
<td>RCMP &amp; Restorative Justice</td>
<td>0</td>
<td>1</td>
<td>34</td>
<td>35</td>
<td>9.1</td>
</tr>
<tr>
<td>Community Services</td>
<td>4</td>
<td>4</td>
<td>18</td>
<td>26</td>
<td>6.8</td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>4</td>
<td>3</td>
<td>18</td>
<td>25</td>
<td>6.5</td>
</tr>
<tr>
<td>School Occupational Therapist</td>
<td>12</td>
<td>11</td>
<td>2</td>
<td>25</td>
<td>6.5</td>
</tr>
<tr>
<td>The Maples 17</td>
<td>0</td>
<td>0</td>
<td>23</td>
<td>23</td>
<td>6.0</td>
</tr>
<tr>
<td>Counsellor (Private/Hospital/Community Service)</td>
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<td>4</td>
<td>15</td>
<td>19</td>
<td>4.9</td>
</tr>
<tr>
<td>Sunnyville Hospital</td>
<td>1</td>
<td>6</td>
<td>11</td>
<td>18</td>
<td>4.7</td>
</tr>
<tr>
<td>Sunnyville Child Development Centre</td>
<td>11</td>
<td>6</td>
<td>1</td>
<td>18</td>
<td>4.7</td>
</tr>
<tr>
<td>Sunnyville Area Health Addictions Treatment Programs</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>16</td>
<td>4.2</td>
</tr>
<tr>
<td>Sunnyville Family Services 18</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>13</td>
<td>3.4</td>
</tr>
<tr>
<td>Sunnyville Area Assessment Network</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>10</td>
<td>2.6</td>
</tr>
<tr>
<td>School Art Therapy</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td>1.8</td>
</tr>
<tr>
<td>Hospital in Neighboring Community #1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>1.8</td>
</tr>
<tr>
<td>Community Living</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>1.6</td>
</tr>
<tr>
<td>Hospital in Neighbouring Community #2</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>1.3</td>
</tr>
<tr>
<td>Big Sisters</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>Counselling Service for Children and Youth 19</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>Youth Crisis Service</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>Fire Prevention</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>School Physical Therapy</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>Service for Students with Sexualized Behaviours</td>
<td>0</td>
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<td>3</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>UBC Hospital</td>
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<td>2</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>The Salvation Army</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Youth Safe House</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Drug and Alcohol Addictions Program</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0.3</td>
</tr>
</tbody>
</table>

16 The Child and Family Services Society provided housing, education, support and counselling, particularly for children experiencing life trauma.
17 The Maples offered programs and services for youth ages 12-17 with significant psychiatric/behavioural difficulties.
18 Sunnyville Family Services provided services for children and families experiencing difficulties.
19 Counselling service from this agency was provided for children and youth who had experienced abuse.
4.2.18 Pass Rates

The Ministry of Education provides districts with the pass rates students in the district achieved on government examinable courses. These pass rates on government examinable courses in 2007-08 are presented for students identified with E/BD as well as for students without special needs for students in the Sunnyville School District and for students in BC (Table 19). This table informs that most students both with and without E/BD passed most of their government examinable courses successfully. In fact, in some subjects, such as in Principles of Mathematics 10, Communications 12, and English 12, the pass rates for students identified with E/BD in the Sunnyville School District were higher than the pass rates for students without special needs in the district.

<table>
<thead>
<tr>
<th>Table 19</th>
<th>Pass Rates on Government Examinable Courses (2007-08) for Students in the Moderate, Intensive/Serious Categories, and Overall as well as for Students without Special Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 10</td>
<td>M-100; I/S-89</td>
</tr>
<tr>
<td>Essentials of Mathematics 10</td>
<td>M-86; I/S-100</td>
</tr>
<tr>
<td>Principles of Mathematics 10</td>
<td>M-100; I/S-100</td>
</tr>
<tr>
<td>Science 10</td>
<td>M-83; I/S-79</td>
</tr>
<tr>
<td>Social Studies 11</td>
<td>M-76; I/S-100</td>
</tr>
<tr>
<td>Communications 12</td>
<td>M-100; I/S-100</td>
</tr>
<tr>
<td>English 12</td>
<td>M-100; I/S-100</td>
</tr>
</tbody>
</table>

M=Students Requiring Moderate Behaviour Support or Students with Mental Illness
I/S=Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness
(BC Ministry of Education, Analysis & Reporting Unit, Students with Special Needs, 2008)

Comments

1. Although the literature described that students with E/BD experienced high rates of academic underachievement (Levy & Chard, 2001), as well as high rates of course and grade failure (Wagner & Blackorby, 1996), the pass rates of students identified with E/BD in the Sunnyville School District on government examinable courses indicated that most students who did complete courses passed them successfully. As the current study did not collect the course grades received by the students, it is not known if the grades received by students identified with
E/BD on May 30, 2008 were lower than those received by students without special needs. Of students in the Sunnyville School District who were identified by the Ministry of Education as students with E/BD in the intensive/serious category, 11% failed English 10, yet by Grade 12, no students with E/BD had failed either Communications 12 or English 12. This suggests that students identified with E/BD who remained in school long enough to complete Grades 11 and 12 were successful in passing their government examinable courses, however the higher pass rates they received may also reflect that their mental health and behaviour challenges were less severe than they were previously and that the students were less affected by them, or that maturation had taken place. Perhaps the students who remained in school were those who completed homework, studied, and had learned to be successful in school.

2. Students identified with E/BD achieved lower pass rates than students without special needs in some courses. In mathematics, 14% of students identified in the moderate category had not passed Essentials of Mathematics 10. Science 10 was more problematic as 21% of students identified in the intensive/serious category and 17% of students identified in the moderate category had not passed this course. Further research could determine why passing certain courses such as Essentials of Mathematics 10 or Science 10 was more difficult for some students identified with E/BD.

4.2.19 Grade-to-Grade Transition Rates and Graduation Rates

The grade-to-grade transition rates for students with E/BD from the 2001-02 school year to the 2007-08 school year are presented in Table 20. As well, the Sunnyville School District reported that for the 2007-08 graduation cohort, 29% of students who had been identified with “Behavioural Needs or Mental Illness” graduated with a BC “Dogwood” Certificate of Graduation within 6 years of their entry to Grade 8 and the Ministry of Education reported that for the 2007-08 school year, 30% of students identified with “Behaviour Needs or Mental Illness” in the province graduated with the BC “Dogwood” Certificate of Graduation within 6 years of their entry to Grade 8.

Comments

1. Table 20 provides information that students with E/BD transitioned successfully from grade to grade in elementary school; however, as they progressed into high school, fewer and fewer transitioned successfully. Grade-to-grade transition rates were particularly low from Grades 10 to 11 and from Grades 11 to 12. For students identified with E/BD, there was a general trend towards improved grade-to-grade transition rates from the 2001-02 to the 2007-08 school years; however, this was not evident for students identified in the intensive/serious category.

2. Some variance was noted in the Grade 8 to higher transition rates in the 2003-04 and the 2006-07 school years as 95% of students identified in the intensive/serious categories transitioned successfully in these years. The 2003-04 cohort of intensive/serious students in the Sunnyville School District identified
as having with a transition rate of 95% in 2003-04 from Grade 8 to higher is also noted to have transitioned at a 74% rate from Grade 10 to higher in the 2005-06 year, a rate higher than the preceding or subsequent year’s cohort. This suggests the importance of successful grade-to-grade transition from the outset of high school to improve rates of successful graduation from high school with a BC “Dogwood” Certificate of Graduation for students identified in the “Behavioural Needs or Mental Illness” categories.

3. Overall, the 29% of students with “Behavioural Needs or Mental Illness” who graduated successfully with the BC “Dogwood” Certificate of Graduation in the Sunnyville School District for the 2007-08 school year was similar to the 30% rate reported for students overall in BC.

<table>
<thead>
<tr>
<th>Grade</th>
<th>2003/04</th>
<th>2004/05</th>
<th>2005/06</th>
<th>2006-07</th>
<th>2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 6 to higher</td>
<td>M-100</td>
<td>M-100</td>
<td>M-100</td>
<td>M-100</td>
<td>M-100</td>
</tr>
<tr>
<td>Grade 8 to higher</td>
<td>M-90</td>
<td>M-90</td>
<td>M-100</td>
<td>M-100</td>
<td>M-100</td>
</tr>
<tr>
<td>Grade 10 to higher</td>
<td>M-85</td>
<td>M-60</td>
<td>M-76</td>
<td>M-71</td>
<td>M-79</td>
</tr>
</tbody>
</table>

M=Students Requiring Moderate Behaviour Support or Students with Mental Illness
I/S=Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness
O=All students identified with “Behavioural Needs or Mental Illness” at both levels of severity
W/O=Students without Special Needs
(BC Ministry of Education, Analysis & Reporting Unit, Students with Special Needs, 2008)

4.2.20 Program Modification

Of the 229 students in Grades 8-12 in The Sunnyville School District who were identified with E/BD on May 30, 2008, 13 were enrolled in modified programs (Table 21). An examination of the files of these students who were placed in modified programs revealed that 8(61.5%) had received psychoeducational assessments. It is suggested that criteria for program modification were not always evident. Modified students ranged from a student whose full scale IQ fell at a standard score of 69 and another whose full scale IQ score fell at a standard score of 74 to others with much higher cognitive ability as evidenced in their assessment information. For instance, one student in a modified program presented with a verbal cognitive standard score of 82 and a performance cognitive standard score of 96 while another student presented with a full scale standard
score of 100, and still another student presented with a verbal cognitive score of 89 and a perceptual reasoning standard score of 100.

Table 21  Number of Students Identified with E/BD in the Sunnyville School District who were Enrolled in Modified Programs in the Moderate, Intensive/Serious Categories and Overall

<table>
<thead>
<tr>
<th></th>
<th>Moderate</th>
<th>Intensive /Serious</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 8</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Grade 9</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Grade 10</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Grade 11</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grade 12</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>10</td>
<td>13</td>
</tr>
</tbody>
</table>

Comments

1. Although it is recognized that completion of modified programs through to Grade 12 as outlined in a student’s individual education plan is successful completion of school for some students, it would be important for rationale for program modification to be clear so that students who have the cognitive ability to be successful in “Dogwood” completion programs be given the opportunity and support to complete these programs.

2. Some students, such as the student described whose full scale IQ fell at a standard score of 69, are currently being reflected in the “Dogwood” program completion rates as reported by the Ministry of Education. Without secondary special education identification being reported to the ministry, it is difficult to discern students whose cognitive ability suggests that they may be best placed in modified programs from those who are placed in modified programs but who could possibly attain a “Dogwood” Certificate of Graduation, as well as from those who are enrolled in regular programs but who are not successful in completing them so they are instead provided with a certification that they have completed a modified program.

4.3  Responding to Question Two

This section responds to the second research question:

What individual, family, community, and school factors are associated with the successful grade-to-grade transition and graduation of students identified with “Behavioural Needs or Mental Illness” for special education purposes, in Grades 8-12, in a suburban school district in British Columbia, Canada?
4.3.1 Grade Pass Rates and Successful Graduation

Students in the Sunnyville School District in Grades 8-11 were considered to have transitioned successfully from grade to grade when they successfully passed an English or Communications course at their grade level. Students in Grade 12 were considered to have graduated from high school in the BC “Dogwood” Diploma Program when they had completed the requisite number of required and elective courses and had achieved all requirements for a BC “Dogwood” Certificate of Graduation. Students in Grades 8-11 typically completed the following required courses yearly:

- English or Communications;
- Social Studies, First Nations Studies or Civic Studies;
- Mathematics Essentials or Mathematics Applications or Mathematics Principles;
- a science course;
- Physical Education;
- Planning; and
- a fine arts and/or an applied skills course (BC MoE, website).

Students in Grade 12 typically completed an English or a Communications course and other courses as required for their BC “Dogwood” Diploma Program. Some students were not enrolled in the BC “Dogwood” Diploma Program but instead worked towards completing an individualized program described as “modified”, as delineated in their individual education plans. For the purposes of this study, the BC “Dogwood” graduation completion rates were used, although it is clearly recognized that for some students, having successfully grade-to-grade transitioned through school and having completed the goals and objectives of their individualized programs was successful completion of high school.

For the purposes of this study, having completed one of each of the four core courses between September 2007 and June 2008 with passing grades was considered to be a successful transition to the next grade.

- English or Communications;
- Social Studies, First Nations Studies or Civic Studies;
- Mathematics Essentials or Mathematics Applications or Mathematics Principles; and
- A science course.

While it is recognized that some students do not successfully complete a course during a given year and subsequently complete or take that same course in summer school or during the following year, for the purposes of this study, the course had to be completed successfully by June 30, 2008; courses subsequently successfully completed in summer school or in the following year were not included. If the course taken was one typically completed by students in a previous grade, it was still included if it was successfully completed by June 30. Success for students in Grade 12 was defined as having completed the BC “Dogwood” Diploma Program requirements by June 30, 2008. It is also recognized that some students in Grade 12 completed their graduation requirements after June 30 by upgrading or by taking courses in summer school or by successfully completing courses during the subsequent school year.
the Sunnyville School District data indicated that of the 229 students identified with E/BD on May 30, 2008, 81(35.4%) met this study's criteria for success, whereas 148(64.6%) of the students identified with E/BD did not meet these criteria. The 35.4% mean pass rate was used as the mean against which the impact of other factors was compared in this study. For instance, if students with X factor grade-to-grade transitioned at a rate higher than 35.4% they were more successful than average for students identified with E/BD in the Sunnyville School District, whereas if students with X factor were less than 35.4% successful, they were considered less successful than average for students identified with E/BD in the district.

All students identified with E/BD in the Sunnyville School District who were enrolled in Grade 8 during the 2007-08 school year had grade-to-grade transitioned successfully from Grade 7 and were enrolled in an entire Grade 8 program. At the completion of their Grade 8 year, of the 38 students identified with E/BD on May 30, 2008, 16(42.1%) of the students identified with E/BD had completed their four core courses successfully. An examination of the files of students who were not successful found that 2 students were gone from the system or were not attending school or had not been given marks although they were not on modified programs. These 2 students had not been removed from the database (suggestive of recent school leaving without registration elsewhere or course noncompletion), 2 students were enrolled in alternate programs and were likely completing courses on a self-paced basis, 1 student was enrolled in modified courses in an alternate program and 2 other students were enrolled in modified programs in regular high schools. For the remaining 15 students, 13 had failed English; 11 had failed social studies; 13 had failed mathematics; and 2 had failed science. It is suggested that most or all of these students subsequently completed their failed courses successfully by completing or repeating them in summer school or by completing or repeating them the following year.

Of the 59 students identified with E/BD on May 30, 2008 who were in Grade 9, only 21(35.6%) had completed each of their four core subjects successfully by June 30. Of the 38 students who had not completed their four core courses by this date, 4 students had left the school system without enrolling elsewhere or were not attending school or had not completed any courses, 5 students were enrolled in alternate programs (likely completing courses on a self-paced basis), 1 student was enrolled in a regional Youth Day Treatment Program, 1 student was enrolled in a regular school and was completing a modified program; and 1 student was on a “no marks given” program but was enrolled in regular courses (this student was subsequently moved on to Grade 10). Of the remaining 26 students, 15 had failed English, 14 had failed social studies, 14 had failed mathematics; and 14 had failed science.

Of the 54 students identified with E/BD in Grade 10 on May 30, 2008, 17(31.5%) had successfully completed their four core subjects by year end. Of the 37 students who had not successfully completed Grade 10, it was difficult to differentiate courses that were failed from courses that had not been completed. Six students for whom marks were not listed were subsequently gone from the school district when the files were rechecked in August 2008. One student was enrolled in no courses and another student was completing regular courses in a regular school but on a modified program. Eleven
students, each of whom was enrolled in one of the district’s alternate schools, had not completed their four core subjects. Of the 11 students, 2 appear to have completed no courses, 5 had completed one course, and 4 had completed two courses. One student was enrolled in a regional Youth Day Treatment Program. Three of the students in the alternate schools were enrolled in modified programs. Of the Grade 10 students identified with E/BD who were enrolled in regular high schools, 14 had either failed or had not completed one of their four core subjects. Course failures were as follows: English (8 students), social studies (9 students), math (9 students), and a science course (11 students).

Of the 45 students identified with E/BD in Grade 11 on May 30, 2008, 19 (45.0%) had successfully completed their four core subjects by year end. By Grade 11, it was more difficult to determine if the students had failed courses or if they had not completed them because they planned to take them in Grade 12. Of the 26 students for whom a failing grade or no grade was documented, 2 had withdrawn from the district in June before the end of the school year, 2 had withdrawn from the district by school start the subsequent September, and 2 were gone from the district with no transfer information provided. One other student had withdrawn with the comment “no work completed”. Of the 6 students who had attended alternate schools, 1 student had completed three courses, 3 students had completed two courses, 1 student had failed each of his/her four core courses, 1 student had received no marks, and another had left the district for a new placement “in care” but had not been withdrawn from the district. Thirteen other students had not taken, completed, or passed their four core subjects. Course failures were as follows: English or Communications (3 students), Social Studies or First Nations Studies or Civic Studies (13 students), mathematics (9 students), and a science course (6 students). No students in Grade 11 were enrolled in modified programs.

There were 33 students in Grade 12 identified with E/BD on May 30, 2008. Of this number, 8 (24.2%) graduated with a BC “Dogwood” Certificate of Graduation at year end. Of the students who did graduate:

- each was born in 1990, making it probable that none had been grade retained;
- 4 were male and 4 were female;
- 3 were also identified as students with learning disabilities;
- 6 were identified in the moderate category and 2 were identified in the intensive/serious category;
- 3 lived with both parents; 4 lived with a mother only, and 1 lived “in care”;
- by May 30, 4 of the students had been identified for less than 2 years, 1 student had been identified for almost 3 years, 1 student had been identified for almost 8 years, and 1 student had been identified for almost 11 years (information on length of identification was not located for 1 student).

Of the remaining 25 students, 20 had not graduated by June, 2008, 15 were male and 10 were female. Five students were enrolled in modified programs. One student had passed each of his/her four core subjects but had not applied for graduation. There was 1 course failure in each of English, social studies and science; there were 2 course failures in mathematics.
Comments

1. BC “Dogwood” grade-to-grade transition rates provide information about how many students were able to register in the subsequent grade based on the successful completion of an English or Communications course at that grade level. What is not provided is how successful students were in completing the courses they did complete, whether they did complete each of their four core subjects, whether they completed their courses by year end or took upgrading in summer school or the subsequent year to complete courses, or whether they were on track to graduate with their same age peers. Further study would provide information about the ways in which students who did successfully grade-to-grade transition were able to progress through school.

2. This study gives evidence that by June 30 of Grade 8, over half of the students identified with E/BD were off track to receive a BC “Dogwood” Certificate of Graduation with their same age peers, mostly because of course failure but also because they stopped attending, or were completing courses at an individual pace, or were enrolled in modified programs. This study did not identify whether the courses they had not completed successfully were later completed in summer school, or whether grade level status was granted without successful course completion and the student was moved on to Grade 9 courses, or whether the student had caught up to his or her peers by taking Grade 8 and 9 courses concurrently the following school year. As the course failure rate was similar for each of the four core subjects, it is suggested that no one core course was more difficult to complete for students identified with E/BD in Grade 8.

3. In Grade 9, the percentage of students who did not successfully complete their four core subjects increased somewhat, although proportionally there were fewer courses failed, suggesting that the Grade 9 students who failed courses did not fail so many as did Grade 8 students who failed 1 or more of their four core courses. Another reason for the lower number of courses failed in Grade 9 may have been that the school system had already lost students who had experienced difficulties due to transfers out of district, nonattendance, or from students having been retained in a course or in courses in Grade 8.

4. Of the students with E/BD in Grade 10, 31.5% had successfully completed each of their four core subjects by year end and the rate of successful course completion increased to 45.0% in Grade 11. Yet, by Grade 12, only 24.2% of the identified students had completed all their requirements to graduate. Further study would determine whether courses in Grade 12 were more difficult for students with E/BD to complete, or whether there were other reasons why so few students with E/BD completed all requirements to graduate by June 30.

5. It is suggested that for many students with E/BD in this study, the path towards school noncompletion diverted by Grade 8, if not before, as many of the students identified with E/BD had not completed their core subjects successfully with their peers by June 30 of Grade 8. Even if the students who had failed courses had taken one of the program options such as summer school, or had subsequently completed a Grade 8 course in Grade 9, or had taken any other option to
progress to Grade 9 with their same age peers, they may once again have faced course noncompletion in Grades 9 and 10 as courses may have become more difficult for them. By Grade 10, the grade-to-grade transition rates suggested that approximately three-quarters of the students with E/BD transitioned on to the subsequent grade; however, this study suggests that some students left school, some failed classes, some were placed in modified programs, some took summer school to catch up, and some transitioned in English but did not pass each of their other core subjects. Pass rates in Grade 10 courses suggested that many of the students in this study had not failed courses; they had simply not completed them. By Grade 11, the rate of successful course completion was higher; however a number of students with E/BD had not completed their four core courses by year end, particularly if they had attended one of the alternate schools. This noncompletion of courses and the falling behind may be the underlying reason why so few of the students with E/BD graduated having obtained a BC “Dogwood” Certificate of Graduation with their same age peers. Indeed, those who did graduate with a BC “Dogwood” Certificate of Graduation were not delayed as each was born in 1990.

6. In Grades 8-12, 13 students identified with E/BD on May 30, 2008 were placed on modified programs. Five of the 13 were enrolled in Grade 12. It is not known whether the students placed on modified programs in Grade 12 had been placed on these programs throughout their schooling or whether they were placed on modified programs in order to complete school with a certification.

7. For the 2007-08 school year, the Ministry of Education reported that 83% of all students in BC without special needs had graduated from high school with the BC “Dogwood” Certificate of Graduation whereas only 30% of students with E/BD had graduated with this certification. The graduation rate for students identified with E/BD in the BC public school system was lower than the rates described in the U.S. based literature. In the literature, graduation rates for students with E/BD were described in the 1990s as ranging from 33% to 40.1% (Razeghi, 1998; S. Wood & Cronin, 1999; The U.S. Department of Education, website). The literature from the U.S. Department of Education (website) indicated that for the 1999-00 school year, based on student enrollment at age 14, the dropout rate for students identified with E/BD was 51.4%, and 40.1% of the students identified with E/BD had graduated with a standard diploma. Although differences in the graduation rates may result from many reasons including differences in the students who are identified with E/BD, it is also suggested that the effect of course noncompletion in high school be examined further for associations with grade-to-grade transition rates.

### 4.3.2 Successful Students by Gender

In Sunnyville, out of 129 males identified with E/BD in Grades 8-12, 48\( (37.2\% )\) had successfully completed the four core subjects in Grades 8-11 or had graduated from high school during the 2007-08 school year with a BC “Dogwood” Certificate of
Graduation. Out of 100 females identified with E/BD in Grades 8-12, 33(33.0%), were successful based on this criteria. Thus, males identified with E/BD were more successful than females with this identification.

Comments
1. Why more males than females identified with E/BD both proportionally and in total number had completed their four core subjects successfully or had graduated with a BC Certificate of Graduation is not known. This is particularly interesting as, at the Grade 8 level, 8 males and 8 females had been successful in meeting these criteria whereas 15 males and 7 females were unsuccessful, suggesting that more males had experienced academic difficulties early on. Yet, in Grade 12, there were as many males as females who were successful in meeting these criteria although there were more males (19) than females (14) identified with E/BD in that grade. It may be that males who were unsuccessful were unsuccessful earlier on and may have dropped out of school earlier. Further research would provide information about the trajectories of males compared to females for successful completion of their four core courses or graduation from high school with the BC “Dogwood” Certificate of Graduation.

4.3.3 Successful Students by Severity Level

Out of 108 high school students in the Sunnyville School District who were identified with E/BD in the moderate category, 44(40.7%) were successful in completing their four core courses or in graduating with a BC “Dogwood” Certificate of Graduation by June 30, 2008. Out of 121 students identified with E/BD in the intensive/serious category, 37(30.6%) met these criteria.

Comments
1. Not unexpectedly, a higher percentage of students identified with E/BD in the moderate category had successfully completed their four core subjects than had students identified with E/BD in the intensive/serious category. This difference provides further evidence that students identified in the intensive/serious category experienced more difficulty in being successful in school. The reasons for their lower rate of success may have included the impact of having more severe E/BD but there may be other factors that had an impact on their rate of success such as higher rates of attentional issues, higher rates of learning disabilities or the impact of factors such as poverty and parenting practices.

4.3.4 Rates of Success for Students Identified in Elementary School as Compared to Students Identified in High School

On May 30, 2008, there were 100 students in Grades 8-12 who had first been identified as students with E/BD in the Sunnyville School District when they were in elementary school and there were 124 students who had first been identified as students
with E/BD in the district when they were in high school. Information for 5 students was not located. Of the 100 students who had first been identified when they were in elementary school:

- 70(70.0%) were male and 30(30.0%) were female;
- 35(50.0%) of the males were identified in the moderate category and 35(50%) were identified in the intensive/serious category;
- 12(40%) of the females were identified in the moderate category and 18(60%) were identified in the intensive/serious category;
- 38(38.0%) of these students had successfully completed their four core courses or had graduated from high school with a BC Dogwood “Certificate of Graduation” by June 30.

Of the 124 students who had first been identified when they were in high school:

- 56(45.2%) were male and 68(54.8%) were female;
- 26(46.4%) of the males were identified in the moderate category and 30(53.6%) of the males were identified in the intensive/serious category;
- 32(47.1%) of the females were identified in the moderate category and 36(52.9%) of the females were identified in the intensive/serious category;
- 40 of the 124(32.3%) of these students had successfully completed their four core courses or had graduated from high school with a BC Dogwood “Certificate of Graduation” by June 30.

Comments

1. Trout, Nordness et al. (2003) stated that they had expected that students identified earlier who received services may have had different patterns of academic functioning from those who had been identified in later grades, either because of the support received earlier, or because their behavioural issues were more severe and they were identified earlier. McLeod and Fettes (2007) reported that youths whose externalizing or internalizing behaviour problems had begun in elementary school who had received support services in elementary school were more likely to present with lower mathematics and reading scores in high school but that students who had presented with low levels of externalizing problems in childhood but high levels of behaviours in adolescence had not presented with these lower scores. When children were described to have experienced high levels of problems at a young age, they had low rates of graduation even when their behaviours improved. In this study, students who were identified in elementary school were actually more successful in completing their four core subjects as 38.0% of students identified in elementary school had successfully met the study’s criteria for success in comparison to the 32.3% of students with E/BD who were identified in high school who met the study’s criteria for success. Whereas it may be thought that later emerging behaviour difficulties may have had less of an effect on learning, and that students who had experienced behaviour challenges for a longer period of time would have been more affected by them, in the Sunnyville School District, early identification as a student with E/BD in the school system was related to higher levels of school
success in high school. It may have been that earlier intervention mediated for the effects of having a behaviour difficulty or that students identified in elementary school were in some way different from students who were first identified when they were in high school. It may also have been that students newly identified in high school were experiencing emigrant mental health/behaviour challenges or that students identified in elementary school had improved in high school but had not been removed from identification. As Trout, Nordness et al. and McLeod and Fettes used assessment scores in mathematics and reading to determine success and this study used successful completion of courses to determine success, there may also be differences because of the ways in which success was determined in the U.S. study, as the Sunnyville study did not factor into findings how successful the students were in completing their four core courses by comparing marks attained.

4.3.5 Rates of Success for Students Identified with E/BD as well as an Additional Identification

The rates of successful completion of the four core courses or in graduating from high school with a BC “Dogwood” Certificate of Graduation for students identified with E/BD who were also identified with an additional secondary identification are presented in Table 23. This table shows that 33 students in the Sunnyville School District with a secondary identification as students with learning disabilities 10(30.3%) met this study’s criteria for success. Of the 4 students in the Sunnyville School District with a secondary identification as students who were gifted, 2 met this study’s criteria for success.

<table>
<thead>
<tr>
<th>Additional Identification</th>
<th>Identification</th>
<th>Successful Students</th>
<th>Unsuccessful Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Identification as a “Student with a Learning Disability”</td>
<td>No</td>
<td>71/196 (36.2%)</td>
<td>125/196 (63.8%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>10/33 (30.3%)</td>
<td>23/33 (69.7%)</td>
</tr>
<tr>
<td>Additional Identification as a “Student who is Gifted”</td>
<td>No</td>
<td>79/225 (35.1%)</td>
<td>146/225 (64.9%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2/4 (50.0%)</td>
<td>2/4 (50.0%)</td>
</tr>
</tbody>
</table>

Comments
1. Of the 33 students who maintained additional identification as “Students with a Learning Disability”, 10(30.3%) met this study’s criteria for success. It may be that the significant intervention received by students identified with learning disabilities that concurrently addressed their E/BD and learning issues helped to maintain these students in school.
2. Although limited understanding can be gained from the pass rates of only 2 students of the 4 with secondary identification as students who are gifted, it is clear that success in school for students with E/BD involves more than having good cognitive ability.

4.3.6 Rates of Success for Students who Received Additional Services

Some students identified with E/BD in Grades 8-12 had received speech and language therapy, art therapy, and/or occupational therapy services. The rates of success experienced by students who received these services are presented in Table 24. Of the 25 students who had received speech and language services, 12(48%) had successfully completed their four core courses or had graduated with a BC "Dogwood" Certificate of Graduation by June 30, 2008. Three out of the 6 students who had received art therapy services and both of the 2 students who had received occupational therapy services met this study’s criteria for success.

Table 23 Rates of Success for Students who Received Additional Services

<table>
<thead>
<tr>
<th>Additional Identification</th>
<th>Identification</th>
<th>Successful Students</th>
<th>Unsuccessful Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech and Language Services</td>
<td>No</td>
<td>69/204 (33.8%)</td>
<td>135/204 (66.2%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>12/25 (48.0%)</td>
<td>13/25 (52.0%)</td>
</tr>
<tr>
<td>Art Therapy Services</td>
<td>No</td>
<td>78/223 (35.0%)</td>
<td>145/223 (65.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>3/6 (50.0%)</td>
<td>3/6 (50.0%)</td>
</tr>
<tr>
<td>Occupational Therapy Services</td>
<td>No</td>
<td>79/227 (34.8%)</td>
<td>148/227 (65.2%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2/2 (100.0%)</td>
<td>0/2 (0.0%)</td>
</tr>
</tbody>
</table>

Comments

1. As compared to the 35.4% mean rate of success, students who had received speech and language services, art therapy, or occupational therapy services were more successful in passing their four core subjects than were students who had not received these services. Although few students with E/BD in Grades 8-12 had experienced either occupational therapy services or art therapy, 12 of the 25 students identified with E/BD in Grades 8-12 had received speech and language services and almost half of these students met the study’s criteria for success. The literature clearly indicated that students identified with E/BD commonly experienced language related issues (e.g., L. Baker & Cantwell, 1982, 1987; G. J. Benner et al., 2002; Cantwell & Baker, 1977; Donahue et al., 1994; Giddan et al., 1996; Sanger et al., 1994; Sturge, 1982). As research by G.J. Benner et al. found that 88% of students identified with E/BD in school programs had expressive language deficits, 68% had receptive language deficits, and 86%
had pragmatic language deficits, it is likely that many of the students identified with E/BD in the Sunnyville School District also had speech and language deficits. As the students in the Sunnyville School District with the most significant or severe and language challenges had received services for their difficulties, it is noted that these students were actually more successful than most students identified with E/BD in completing their four core courses or graduating with a BC “Dogwood” Certificate of Graduation.

2. In recognition of the higher rates of success obtained by students identified with E/BD who had also received speech and language services, it is recommended that consultation or services from speech and language therapists continue to be provided for students identified with E/BD and/or that the district examine the possibility of enhancing or expanding speech and language consultation and in-service for classroom teachers and support teachers who maintain students with E/BD in their classrooms.

3. Also in recognition of the higher rates of success obtained by students identified with E/BD who had received speech and language services, it is recommended that the district examine the possibility of providing direct service to students identified with E/BD in high school.

4.3.7 Rates of Success by Diagnoses

The rates of successful completion of the four core courses or graduation from high school by June 30 with a “Dogwood” Certificate of Graduation for students with E/BD in Grades 8-12 by diagnoses are presented in Table 25 in order of prevalence. Most successful were students with: Tourette’s disorder (58.8%), anxiety disorder (38.5%), attention disorders (36.9%), learning disabilities (medically diagnosed) (36.4%), fetal alcohol spectrum disorder/neonatal abstinence syndrome (35.8%), separation anxiety disorder (35.7%), and oppositional defiant disorder (35.7%).

Comments:

1. The cluster of behaviours including impulsivity, hyperactivity and poor concentration were found to be common in students with externalizing behaviours (Angold et al., 1999; Hinshaw, 1992; Wehby, Falk et al., 2003; Willcutt & Pennington, 2000), in students with academic failure (Hinshaw, 1992; Barriga, et al., 2002; Frick et al., 1991); in students with dyslexia (Knivsberg & Andreassen, 2008) and in students with verbal deficits (Frick et al.; Werry et al., 1987). Why students identified with attention deficits were among the students who were more successful than other students with E/BD in this study is unknown.
## Table 24  Rates of Success by Diagnoses

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Successful Students</th>
<th>Unsuccessful Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attention Disorder</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>57/164 (34.8%)</td>
<td>107/164 (65.2%)</td>
</tr>
<tr>
<td>Yes</td>
<td>24/65 (36.9%)</td>
<td>41/65 (63.1%)</td>
</tr>
<tr>
<td><strong>Anxiety Disorder</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>61/177 (34.5%)</td>
<td>116/177 (65.5%)</td>
</tr>
<tr>
<td>Yes</td>
<td>20/52 (38.5%)</td>
<td>32/52 (61.5%)</td>
</tr>
<tr>
<td><strong>Depression</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>68/189 (36.0%)</td>
<td>121/189 (64.0%)</td>
</tr>
<tr>
<td>Yes</td>
<td>13/40 (32.5%)</td>
<td>27/40 (67.5%)</td>
</tr>
<tr>
<td><strong>Drug Involvement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>72/196 (36.7%)</td>
<td>124/196 (63.3%)</td>
</tr>
<tr>
<td>Yes</td>
<td>9/33 (27.3%)</td>
<td>24/33 (72.7%)</td>
</tr>
<tr>
<td><strong>Oppositional Defiant Disorder</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>71/201 (35.3%)</td>
<td>130/201 (64.7%)</td>
</tr>
<tr>
<td>Yes</td>
<td>10/28 (35.7%)</td>
<td>18/28 (64.3%)</td>
</tr>
<tr>
<td><strong>Suicidal Ideation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>75/208 (36.1%)</td>
<td>133/208 (63.9%)</td>
</tr>
<tr>
<td>Yes</td>
<td>6/21 (28.6%)</td>
<td>15/21 (71.4%)</td>
</tr>
<tr>
<td><strong>Tourette’s Disorder</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>71/212 (33.5%)</td>
<td>141/212 (66.5%)</td>
</tr>
<tr>
<td>Yes</td>
<td>10/17 (58.8%)</td>
<td>7/17 (41.2%)</td>
</tr>
<tr>
<td><strong>Separation Anxiety Disorder</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>76/215 (35.3%)</td>
<td>139/215 (64.7%)</td>
</tr>
<tr>
<td>Yes</td>
<td>5/14 (35.7%)</td>
<td>9/14 (64.3%)</td>
</tr>
<tr>
<td><strong>Alcohol Involvement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>80/216 (37.0%)</td>
<td>136/216 (63.0%)</td>
</tr>
<tr>
<td>Yes</td>
<td>1/13 (7.7%)</td>
<td>12/13 (92.3%)</td>
</tr>
<tr>
<td><strong>Posttraumatic Stress Disorder</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>77/217 (35.5%)</td>
<td>140/217 (64.5%)</td>
</tr>
<tr>
<td>Yes</td>
<td>4/12 (33.3%)</td>
<td>8/12 (66.7%)</td>
</tr>
<tr>
<td><strong>Fetal Alcohol Spectrum Disorder and Neonatal Abstinence Syndrome</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>78/218 (35.8%)</td>
<td>140/218 (64.2%)</td>
</tr>
<tr>
<td>Yes</td>
<td>3/11 (27.3%)</td>
<td>8/11 (72.7%)</td>
</tr>
<tr>
<td><strong>Learning Disabilities, Medically Diagnosed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>77/218 (35.3%)</td>
<td>141/218 (64.7%)</td>
</tr>
<tr>
<td>Yes</td>
<td>4/11 (36.4%)</td>
<td>7/11 (63.6%)</td>
</tr>
<tr>
<td><strong>Parent Child Relationship Problems</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>78/219 (35.6%)</td>
<td>141/219 (64.4%)</td>
</tr>
<tr>
<td>Yes</td>
<td>3/10 (30.0%)</td>
<td>7/10 (70.0%)</td>
</tr>
<tr>
<td><strong>Sexual Abuse of Child</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>78/220 (35.5%)</td>
<td>142/220 (64.5%)</td>
</tr>
<tr>
<td>Yes</td>
<td>3/9 (33.3%)</td>
<td>6/9 (66.7%)</td>
</tr>
<tr>
<td><strong>Attachment Disorders</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>79/221 (35.7%)</td>
<td>142/221 (64.3%)</td>
</tr>
<tr>
<td>Yes</td>
<td>2/8 (25.0%)</td>
<td>6/8 (75.0%)</td>
</tr>
</tbody>
</table>
The success rates for the students with some dual diagnoses are presented in Table 26. This table shows that the students with attentional and anxiety disorders and the 2 students identified with depression and conduct/disruptive behaviours were more successful than the mean rate of success for students identified with E/BD in this study.

**Comments**

1. Although the literature suggested that some combinations of diagnoses were more problematic than others (Gresham et al., 2000), and that more students with comorbid disorders may drop out of school (Cullinan & Epstein, 2001), information from the Sunnyville School District suggests that students who were identified with comorbid attention and anxiety disorders were more likely to meet the study’s criteria for success (37.5%) than the mean rate of success for students with E/BD in the district whereas students identified with anxiety disorders and depression related disorders were less likely to meet the study’s criteria for success (31.6%). Few students maintained attention disorders and conduct/disruptive behaviours; or anxiety and conduct/disruptive behaviours; or depression and conduct/disruptive behaviours. In the latter two small groups, all students met the study’s criteria for success.

<table>
<thead>
<tr>
<th>Disorders</th>
<th>Successful Students</th>
<th>Unsuccessful Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention Deficit Disorders and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct/Disruptive Behaviours</td>
<td>No</td>
<td>80/226 (35.4%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1/3 (33.3%)</td>
</tr>
<tr>
<td>Attention Deficit Disorders and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety Disorders</td>
<td>No</td>
<td>75/213 (35.2%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>6/16 (37.5%)</td>
</tr>
<tr>
<td>Anxiety and Depression Related</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disorders</td>
<td>No</td>
<td>75/210 (35.7%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>6/19 (31.6%)</td>
</tr>
<tr>
<td>Anxiety and Conduct/Disruptive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behaviours</td>
<td>No</td>
<td>80/228 (35.1%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1/1 (100.0%)</td>
</tr>
<tr>
<td>Depression and Conduct/Disruptive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behaviours</td>
<td>No</td>
<td>79/227 (34.8%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2/2 (100.0%)</td>
</tr>
</tbody>
</table>

**4.3.8 Rates of Success by Behaviour Description**

Rates of successful completion of the four core subjects for students identified with E/BD in the Sunnyville School District in Grades 8-12 by described behaviours are
provided in Table 27. As the students’ files may not have identified all of each student’s behaviours and as a limited numbers of students were associated with some behaviours, interpretation of this information is limited. The level of success used as a benchmark level was 35.5% as this was the mean rate of successful completion of the four core subjects overall for students in Grades 8-12 who were identified with E/BD in the district. Table 28 organizes these same behaviours into four groups to compare them with the mean level of success attained by students in Grades 8-12 who were identified with E/BD: more than 35.5% successful; 0-10% less successful; 11-30% less successful; and, the category in which no students with these behaviours were successful.

Table 26 Rates of Success for Students Identified with E/BD in the Sunnyville School District in Grades 8-12 by Described Behaviours

<table>
<thead>
<tr>
<th>Behaviour Description</th>
<th>Successful Students</th>
<th>Unsuccessful Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is often absent, truancy a problem</td>
<td>No</td>
<td>69/184 (37.5%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>12/45 (26.7%)</td>
</tr>
<tr>
<td>Fights, assaults others</td>
<td>No</td>
<td>75/206 (36.4%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>6/23 (26.1%)</td>
</tr>
<tr>
<td>Is noncompliant, rule breaks, disobedient, defiant</td>
<td>No</td>
<td>77/208 (37.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>4/21 (19.0%)</td>
</tr>
<tr>
<td>Has sexualized behaviours (e.g., inappropriate touching, inappropriate drawings)</td>
<td>No</td>
<td>76/213 (35.7%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>5/16 (31.3%)</td>
</tr>
<tr>
<td>Has theft issues, steals</td>
<td>No</td>
<td>77/214 (36.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>4/15 (26.7%)</td>
</tr>
<tr>
<td>Has poor socialization, is isolated</td>
<td>No</td>
<td>78/216 (36.1%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>3/13 (23.1%)</td>
</tr>
<tr>
<td>Bullies, harasses others</td>
<td>No</td>
<td>76/217 (35.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>5/12 (41.7%)</td>
</tr>
<tr>
<td>Has fire starting issues</td>
<td>No</td>
<td>79/217 (36.4%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2/12 (16.7%)</td>
</tr>
<tr>
<td>Cuts self</td>
<td>No</td>
<td>76/218 (34.9%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>5/11 (45.5%)</td>
</tr>
<tr>
<td>Behaviour Description</td>
<td>Successful Students</td>
<td>Unsuccessful Students</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>---------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Has disruptive behaviours</td>
<td>No</td>
<td>80/220 (36.4%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1/9 (11.1%)</td>
</tr>
<tr>
<td>Doesn’t get work done, has work refusal issues</td>
<td>No</td>
<td>80/219 (36.5%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1/10 (10.0%)</td>
</tr>
<tr>
<td>Throws things</td>
<td>No</td>
<td>79/220 (35.9%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2/9 (22.2%)</td>
</tr>
<tr>
<td>Is off task, has a short attention span</td>
<td>No</td>
<td>77/222 (34.7%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>4/7 (57.1%)</td>
</tr>
<tr>
<td>Has homicidal behaviours</td>
<td>No</td>
<td>79/222 (35.6%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2/7 (28.6%)</td>
</tr>
<tr>
<td>Has vandalism issues (e.g., fire alarm pulling)</td>
<td>No</td>
<td>80/222 (36.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1/7 (14.3%)</td>
</tr>
<tr>
<td>Has poor organization issues</td>
<td>No</td>
<td>80/224 (35.7%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1/5 (20.0%)</td>
</tr>
<tr>
<td>Is moody, emotional</td>
<td>No</td>
<td>81/224 (36.2%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0/5 (0.0%)</td>
</tr>
<tr>
<td>Pushes</td>
<td>No</td>
<td>81/225 (36.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0/4 (0.0%)</td>
</tr>
<tr>
<td>Tantrums</td>
<td>No</td>
<td>79/225 (35.1%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2/4 (50.0%)</td>
</tr>
<tr>
<td>Spits at others</td>
<td>No</td>
<td>81/225 (36.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0/4 (0.0%)</td>
</tr>
<tr>
<td>Is afraid of situations, fearful</td>
<td>No</td>
<td>80/225 (35.6%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1/4 (25.0%)</td>
</tr>
<tr>
<td>Lies</td>
<td>No</td>
<td>80/225 (35.6%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1/4 (25.0%)</td>
</tr>
<tr>
<td>Is physically aggressive, hits, pushes</td>
<td>No</td>
<td>81/226 (35.8%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0/3 (0.0%)</td>
</tr>
<tr>
<td>Has hallucinations</td>
<td>No</td>
<td>81/226 (35.8%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0/3 (0.0%)</td>
</tr>
<tr>
<td>Behaviour Description</td>
<td>Successful Students</td>
<td>Unsuccessful Students</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Has graffiti problems</td>
<td>No</td>
<td>79/226 (35.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2/3 (66.7%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>147/226 (65.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/3 (33.3%)</td>
</tr>
<tr>
<td>Has poor gross motor skills</td>
<td>No</td>
<td>81/226 (35.8%)</td>
</tr>
<tr>
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<td>0/3 (0.0%)</td>
</tr>
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<td></td>
<td></td>
<td>145/226 (64.2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3/3 (100.0%)</td>
</tr>
<tr>
<td>Is disrespectful</td>
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<td>81/226 (35.8%)</td>
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<tr>
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<td>0/3 (0.0%)</td>
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<td></td>
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<td>145/226 (64.2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3/3 (100.0%)</td>
</tr>
<tr>
<td>Has headaches, stomach aches</td>
<td>No</td>
<td>80/226 (35.4%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1/3 (33.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>146/226 (64.6%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2/3 (66.7%)</td>
</tr>
<tr>
<td>Kicks</td>
<td>No</td>
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</tr>
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<td>0/2 (0.0%)</td>
</tr>
<tr>
<td></td>
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<td>2/2 (100.0%)</td>
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<tr>
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<td>0/2 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>146/227 (64.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2/2 (100.0%)</td>
</tr>
<tr>
<td>Has impulsive behaviours</td>
<td>No</td>
<td>81/227 (35.7%)</td>
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<tr>
<td></td>
<td>Yes</td>
<td>0/2 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>146/227 (64.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2/2 (100.0%)</td>
</tr>
<tr>
<td>Has self injurious behaviours</td>
<td>No</td>
<td>81/227 (35.7%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
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</tr>
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<td></td>
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<td>146/227 (64.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2/2 (100.0%)</td>
</tr>
<tr>
<td>Has used weapons at school (e.g.,</td>
<td>No</td>
<td>80/227 (35.2%)</td>
</tr>
<tr>
<td>knives)</td>
<td>Yes</td>
<td>1/2 (50.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>147/227 (64.8%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/2 (50.0%)</td>
</tr>
<tr>
<td>Has social issues, has personal</td>
<td>No</td>
<td>81/227 (35.7%)</td>
</tr>
<tr>
<td>boundary issues</td>
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<td>0/2 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>146/227 (64.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2/2 (100.0%)</td>
</tr>
<tr>
<td>Has diarrhoea problems</td>
<td>No</td>
<td>80/227 (35.2%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1/2 (50.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>147/227 (64.8%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/2 (50.0%)</td>
</tr>
<tr>
<td>Has vomiting problems</td>
<td>No</td>
<td>80/228 (35.1%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1/1 (100.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>148/228 (64.9%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0/1 (0.0%)</td>
</tr>
<tr>
<td>Has poor fine motor skills</td>
<td>No</td>
<td>81/228 (35.5%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0/1 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>147/228 (64.5%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/1 (100.0%)</td>
</tr>
<tr>
<td>Cries</td>
<td>No</td>
<td>81/228 (35.5%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0/1 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>147/228 (64.5%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/1 (100.0%)</td>
</tr>
<tr>
<td>Has poor hygiene</td>
<td>No</td>
<td>81/228 (35.5%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0/1 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>147/228 (64.5%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/1 (100.0%)</td>
</tr>
</tbody>
</table>
### Table 27 Rates of Success for Students in Grades 8-12 with Specific Behaviours by Percentage Grouped

<table>
<thead>
<tr>
<th>Proportion (%) Successful</th>
<th>0-10% Less Successful</th>
<th>11-30 % Less Successful</th>
<th>No Students Successful</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 35.5% Successful</td>
<td>• Has headaches,</td>
<td>• Is afraid of situations, is fearful* (25%)</td>
<td>• Is moody, emotional*</td>
</tr>
<tr>
<td></td>
<td>• Has stomach aches* (33.3%)</td>
<td>• Lies* (25.0%)</td>
<td>• Pushes*</td>
</tr>
<tr>
<td></td>
<td>• Has sexualized behaviours (31.3%)</td>
<td>• Has poor socialization, is isolated (23.1%)</td>
<td>• Spits at others*</td>
</tr>
<tr>
<td></td>
<td>• Has homicidal behaviours* (28.6%)</td>
<td>• Throws things* (22.2%)</td>
<td>• Is physically aggressive, hits, pushes*</td>
</tr>
<tr>
<td></td>
<td>• Is often absent, truancy a problem (26.7%)</td>
<td>• Has poor organization* (20.0%)</td>
<td>• Has hallucinations*</td>
</tr>
<tr>
<td></td>
<td>• Has theft issues, steals (26.7%)</td>
<td>• Is noncompliant, rule breaks, is disobedient, is defiant (19.0%)</td>
<td>• Has poor gross motor skills*</td>
</tr>
<tr>
<td></td>
<td>• Fights, assaults others (26.1%)</td>
<td>• Has fire starting issues (16.7%)</td>
<td>• Is disrespectful*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Has vandalism issues* (14.3%)</td>
<td>• Kicks*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Has disruptive behaviours* (11.1%)</td>
<td>• Grabs*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Doesn’t get work done, has work refusal issues (10.0%)</td>
<td>• Has impulsive behaviours*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Has self-injurious behaviour*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Has social issues, personal boundary issues*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Has poor fine motor skills*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Cries*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Has poor hygiene*</td>
</tr>
</tbody>
</table>

*Indicates a description used for fewer than 10 students.

### Comments

1. It is noted that students who exhibited poor organization and who didn't get work done or who refused to work were less successful than students who were often absent/truant from school. This suggests that helping students with their organizational skills so that they can complete work may be a successful approach to improve school success.

2. Students who bullied or harassed others were more successful than students who were fearful or who had had poor socializations skills and/or who were isolated. The importance of developing social skills for students who were unable to engage with others make be critical for students in high school to...
maintain them in school so that they can develop relationships with peers and adults in school and so that they can work cooperatively in classes with others.

4.3.8.1 Rates of Success for Students in French Immersion Programs

The only student in high school enrolled in a French Immersion program during the 2007-08 school year who was identified with E/BD on May 30, 2008 in the Sunnyville School District was not successful in passing his/her four core courses. A file notation stated that this student had an “F” average.

4.3.9 Rates of Success for Students who Attended Alternate Schools

No students in the Sunnyville School District in Grades 8-12 who were identified with E/BD and who attended the district’s two alternate schools had successfully completed their four core subjects or graduated with the BC “Dogwood” Certificate of Graduation by June 30, 2008. This may have been because students who attended the district’s alternate schools had transferred into the alternate schools with partial credits prior to entry so that four core courses were not required, or that students enrolled in alternate schools did not typically take four core courses during any school year, or that some of the students identified with E/BD in the alternate schools were receiving modified programs, or that they completed courses on a self paced schedule rather than by year end. It may also have been that students who were enrolled in the alternate schools had, as the literature suggested, experienced years of academic failure, time out of the classroom, less positive relationships with teachers before they received intervention in the alternate schools with the effect of these factors being their diminished success. It may also have been that the education provided in alternate schools may have some of the weaknesses described in the U.S. based research.

4.3.10 Rates of Success for Students who had Attended High Numbers of Schools

Although information about number of schools students with E/BD had attended was not always available in the district held information, when a student had attended numerous schools, this information was usually documented. Of the students in Grades 8-12 who were identified with E/BD on May 30, 2008, 26 were identified as having attended 5 or more schools. Of the 26, only 5 were in Grades 11 and 12 and none of these students was identified as successful by the criteria established in this study. Two (7.7%) of the students who had attended 5 or more schools did meet this study’s criteria for success. These two students were in Grades 9 and 10. One of these students was identified in the moderate category and had attended 9 schools. The other student was in Grade 10, had attended 8 schools, and this student was also identified as a student with a learning disability.
Comments

1. It is suggested that having attended a high number of schools is related to a lack of success in school. Although each additional year of school would theoretically give opportunity for a student to have attended more schools, there were far fewer students identified with E/BD in Grades 11 and 12 who had attended 5 or more schools than there were in lower grades. Thus, it is suggested that students who had attended a high number of schools may not have remained in school long enough to have attended Grades 11 and 12. Further study would track the trajectories of students who had attended a high number of schools to determine if there was a relationship between having attended a high number of schools and dropping out of school. As there were students in elementary school who would have attended a higher number of schools by the time they reached high school than were documented for students in Grades 8-12, further study would also determine whether these students remained in school or whether they dropped out of school before reaching Grades 11 and 12.

4.3.11 Rates of Success by Caregiver Profile

The rates of successful completion of the four core courses or in graduating from high school with a BC “Dogwood” Certificate of Graduation for students in Grades 8-12 who were identified with E/BD are presented by their current parent/caregiver profiles in Table 29. Using the success rate of 35.5% (the mean rate of success for students with E/BD in the Sunnyville School District students), only students who lived with two parents including parent/stepparent combinations were more successful than the mean rate as 45.7% of the students who lived with two parents and 40.0% of students who lived with a parent and an identified stepparent were more successful than the mean rate of success for all students identified with E/BD in Grades 8-12. As stepparents were not always identified in files, it is likely that some of the two parent families were actually parent/stepparent homes, therefore, it would be more accurate to state that 45% of the students living in two parent families of any composition were more successful than the mean rate of success for students identified with E/BD in Grades 8-12 based on this study’s criteria for success. Of students in Grades 8-12 who were identified with E/BD, 33.3% who lived “in care” met the study’s criteria for success. Of the 9 additional students who had once lived “in care” and who were no longer in these placements, only 1 of these students met this study’s criteria for success and that student was in Grade 8. Thus, of the 45 students in Grades 8-12 who were identified as ever having lived “in care” 13(28.9%) met this study’s criteria for success. Of students with E/BD who lived with a mother only, 32.1% were successful and of students with E/BD living with a father only, 30.8% were successful. If the students living with a grandparent or grandparents, 30.8% met the study’s criteria for success. No students who lived with parents in alternating care or with another relative met the study’s criteria for success.

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20 Extremes in school placements for students in elementary school included: Grade 2 student- 4 placements; Grade 4 student- 5 placements; Grade 5 student-11 placements; Grade 7 student-6 placements.
Table 28  Rates of Success for Students in Grades 8-12 by Caregiver Profile

<table>
<thead>
<tr>
<th>Current Parent Profile</th>
<th>Proportion (%) Successful</th>
<th>Unsuccessful Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Successful Students</td>
<td>Unsuccessful Students</td>
</tr>
<tr>
<td>Lives with Two Parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>49/159 (30.8%)</td>
<td>110/159 (69.2%)</td>
</tr>
<tr>
<td>Yes</td>
<td>32/70 (45.7%)</td>
<td>38/70 (54.3%)</td>
</tr>
<tr>
<td>Lives with a Parent and an Identified Stepparent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>77/219 (35.2%)</td>
<td>142/219 (64.8%)</td>
</tr>
<tr>
<td>Yes</td>
<td>4/10 (40.0%)</td>
<td>6/10 (60.0%)</td>
</tr>
<tr>
<td>Lives “in Care”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>69/193 (35.8%)</td>
<td>124/193 (64.2%)</td>
</tr>
<tr>
<td>Yes</td>
<td>12/36 (33.3%)</td>
<td>24/36 (66.7%)</td>
</tr>
<tr>
<td>Lives with Mother Only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>56/151 (37.1%)</td>
<td>95/151 (62.9%)</td>
</tr>
<tr>
<td>Yes</td>
<td>25/78 (32.1%)</td>
<td>53/78 (67.9%)</td>
</tr>
<tr>
<td>Lives with Father Only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>77/216 (35.6%)</td>
<td>139/216 (64.4%)</td>
</tr>
<tr>
<td>Yes</td>
<td>4/13 (30.8%)</td>
<td>9/13 (69.2%)</td>
</tr>
<tr>
<td>Lives with Grandparent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>77/216 (35.6%)</td>
<td>139/216 (64.4%)</td>
</tr>
<tr>
<td>Yes</td>
<td>4/13 (30.8%)</td>
<td>9/13 (69.2%)</td>
</tr>
<tr>
<td>Lives with Parents who Alternate Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>81/227 (35.7%)</td>
<td>146/227 (64.3%)</td>
</tr>
<tr>
<td>Yes</td>
<td>0/2 (0.0%)</td>
<td>2/2 (100.0%)</td>
</tr>
<tr>
<td>Other form of Parenting (e.g., other relative)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>81/226 (35.8%)</td>
<td>145/226 (64.2%)</td>
</tr>
<tr>
<td>Yes</td>
<td>0/3 (0.0%)</td>
<td>3/3 (100.0%)</td>
</tr>
</tbody>
</table>

Comments

1. The research literature reported that living with two parents was associated with better performance in school (Hetherington, Bridges, & Insabella, 1998; Manning & Lamb, 2003; Parcel & Dufur, 2001; Sun, 2003). Findings from this study confirmed that in the Sunnyville School District, students identified with E/BD who lived with two parents (including parent/stepparent combinations) were more successful in completing their four core subjects or in graduating from high school by June 30, 2008 than were students who were parented differently.

2. According to the BC Office of the Provincial Health Officer (2006), 1.0% of children and youth lived “in care” at any one point in time and 1.5% of children and youth lived “in care” during the course of a year. It is probable that between 70 and 105 of all students in the Sunnyville School District in Grades 8-12 lived “in care” on May 30, 2008. Thus, it is suggested that between 34.3% and 50.9% of students “in care” in Grades 8-12 were identified with E/BD. As the E/BD category captured between one third and one half of students “in care” in the Sunnyville School District, it is recommended that the higher level of need of these students be considered when developing interventions for them.
3. This study examined the rates of success for students in Grades 8-12 who were identified with E/BD based on their home placement on May 30, 2008. It did not assess the impact of the length of time of the placement on school success. As well, the study did not compare rates of success with age of family dissolution or age of placement “in care” which the literature indicated also affected the academic success of children and youth.

4.3.12 Rates of Success for Students who had Experienced Extremes in Home Placements

In the Sunnyville School District, there were 11 students in Grades 8-12 who were identified with E/BD who had experienced 4 or more home placements. Each of these students was identified in the intensive/serious category and 4 of these students resided “in care” on May 30. Only 1 (9.1%) of these students had passed each of English, social studies, science, and mathematics successfully by June 30. This student had received a number of courses delivered individually in a support room.

Comments

1. This study found that having experienced a high number of home placements was related to a significantly lower rate of school success in high school. It is therefore recommended that, when possible, home placements remain stable.
2. It would be informative to find out how the one student who had experienced a high number of home placements was able to be successful in school.

4.3.13 Rates of Success by Community Services Received

Rates of success of students in Grades 8-12 who were identified with E/BD are presented by service provider in Table 30 in order of prevalence for service providers that served 4 or more students. Table 31 groups this information. Of these community based services, students who were supported by a non school psychologist, a private counsellor, BC Children’s Hospital a paediatrician, Sunnyville Family Services and Hospital in Neighbouring Community #1 achieved a higher than average rate of success.

Table 29 Rates of Success for Students Identified with E/BD in the Sunnyville School District who were in Grades 8-12 by Community Services Received

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Service Used</th>
<th>Successful Students</th>
<th>Unsuccessful Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Children and Family Development Social Worker</td>
<td>No</td>
<td>62/163 (38.0%)</td>
<td>101/163 (62.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>19/66 (28.8%)</td>
<td>47/66 (71.2%)</td>
</tr>
<tr>
<td>Ministry of Children and Family Development Mental Health Worker</td>
<td>No</td>
<td>62/170 (36.5%)</td>
<td>108/170 (63.5%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>19/59 (32.2%)</td>
<td>40/59 (67.8%)</td>
</tr>
<tr>
<td>Service Provider</td>
<td>Service Used</td>
<td>Successful Students</td>
<td>Unsuccessful Students</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------------</td>
<td>---------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Paediatrician</td>
<td>No</td>
<td>62/184 (33.7%)</td>
<td>122/184 (66.3%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>19/45 (42.2%)</td>
<td>26/45 (57.8%)</td>
</tr>
<tr>
<td>BC Children’s Hospital</td>
<td>No</td>
<td>55/171 (32.2%)</td>
<td>116/171 (67.8%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>26/58 (44.8%)</td>
<td>32/58 (55.2%)</td>
</tr>
<tr>
<td>RCMP &amp; Restorative Justice</td>
<td>No</td>
<td>78/195 (40.0%)</td>
<td>117/195 (60.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>3/34 (8.8%)</td>
<td>31/34 (91.2%)</td>
</tr>
<tr>
<td>Psychologist (Private/Hospital/Community Service)</td>
<td>No</td>
<td>69/206 (33.5%)</td>
<td>137/206 (66.5%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>12/23 (52.2%)</td>
<td>11/23 (47.8%)</td>
</tr>
<tr>
<td>The Maples²¹</td>
<td>No</td>
<td>73/206 (35.4%)</td>
<td>133/206 (64.6%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>8/23 (34.8%)</td>
<td>15/23 (65.2%)</td>
</tr>
<tr>
<td>Child and Family Services Society</td>
<td>No</td>
<td>76/207 (36.7%)</td>
<td>131/207 (63.3%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>5/22 (22.7%)</td>
<td>17/22 (77.3%)</td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>No</td>
<td>75/211 (35.5%)</td>
<td>136/211 (64.5%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>6/18 (33.3%)</td>
<td>12/18 (66.7%)</td>
</tr>
<tr>
<td>Community Services</td>
<td>No</td>
<td>75/211 (35.5%)</td>
<td>136/211 (64.5%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>6/18 (33.3%)</td>
<td>12/18 (66.7%)</td>
</tr>
<tr>
<td>Sunnyville Area Health Addictions Treatment Programs</td>
<td>No</td>
<td>77/213 (36.2%)</td>
<td>136/213 (63.8%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>4/16 (25.0%)</td>
<td>12/16 (75.0%)</td>
</tr>
<tr>
<td>Counsellor (Private/Hospital/Community Service)</td>
<td>No</td>
<td>74/214 (34.6%)</td>
<td>140/214 (65.4%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>7/15 (46.7%)</td>
<td>8/15 (53.3%)</td>
</tr>
<tr>
<td>Sunnyville Hospital</td>
<td>No</td>
<td>78/218 (35.8%)</td>
<td>140/218 (64.2%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>3/11 (27.3%)</td>
<td>8/11 (72.7%)</td>
</tr>
<tr>
<td>Hospital in Nearby Community #1</td>
<td>No</td>
<td>79/224 (35.3%)</td>
<td>145/224 (64.7%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2/5 (40.0%)</td>
<td>3/5 (60.0%)</td>
</tr>
<tr>
<td>Sunnyville Family Services</td>
<td>No</td>
<td>79/224 (35.3%)</td>
<td>145/224 (64.7%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2/5 (40.0%)</td>
<td>3/5 (60.0%)</td>
</tr>
<tr>
<td>Counselling Service for Children and Youth</td>
<td>No</td>
<td>81/225 (36.0%)</td>
<td>144/225 (64.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0/4 (0.0%)</td>
<td>4/4 (100.0%)</td>
</tr>
</tbody>
</table>

²¹ The Maples provides programs and services throughout BC for troubled youth aged 12-17 with significant psychiatric & behavioural difficulties.
<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Service Used</th>
<th>Successful Students</th>
<th>Unsuccessful Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital in Nearby Community #2</td>
<td>No</td>
<td>81/225 (36.0%)</td>
<td>144/225 (64.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0/4 (0.0%)</td>
<td>4/4 (100.0%)</td>
</tr>
<tr>
<td>Big Sisters</td>
<td>No</td>
<td>81/225 (36.0%)</td>
<td>144/225 (64.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0/4 (0.0%)</td>
<td>4/4 (100.0%)</td>
</tr>
<tr>
<td>Youth Crisis</td>
<td>No</td>
<td>81/225 (36.0%)</td>
<td>144/225 (64.0%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1/4 (25.0%)</td>
<td>3/4 (75.0%)</td>
</tr>
</tbody>
</table>

Table 30  Rates of Success for Students in Grades 8-12 Identified with E/BD by Community Services Received Grouped

<table>
<thead>
<tr>
<th>More than 35.4% Successful</th>
<th>0-10% Less Successful</th>
<th>11-30 % Less Successful</th>
<th>No Students Successful</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Psychologist (Private/Hospital/Community (52.2%)</td>
<td>• The Maples (34.8%)</td>
<td>• Sunnyville Addictions Services (25%)</td>
<td></td>
</tr>
<tr>
<td>• Counsellor (Private/Hospital/Community Services (46.7%)</td>
<td>• Psychiatrist (33.3%)</td>
<td>• Sunnyville Child and Family Services Society (22.7%)</td>
<td></td>
</tr>
<tr>
<td>• BC Children’s Hospital (44.8%)</td>
<td>• Ministry of Children and Family Development Mental Health Worker (32.2%)</td>
<td>• RCMP &amp; Restorative Justice (8.8%)</td>
<td></td>
</tr>
<tr>
<td>• Pediatrician (42.2%)</td>
<td>• Ministry of Children and Family Development Social Worker (28.8%)</td>
<td>• Hospital in Nearby Community #2*</td>
<td></td>
</tr>
<tr>
<td>• Sunnyville Family Services (40.0%)*</td>
<td>• Sunnyville Hospital (27.3%)</td>
<td>• Counselling Service for Children and Youth*</td>
<td></td>
</tr>
<tr>
<td>• Hospital in Nearby Community #1 (40.0%)*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Represents fewer than 10 students.

Comments
1. Information provided in Table 31 suggests that as support from out of school psychologists, counsellors, paediatricians BC Children’s Hospital results in better school outcomes for students identified with E/BD that support from these agencies be encouraged and that the Sunnyville School District examine approaches used by these agencies with a goal of finding approaches that could be adopted in the school setting.
2. As this study provided rates of success by whether a service provider had ever provided support for the student, it did not take into consideration the amount of support received by the student, the length of support, when the service was received, or what kind of service was provided, as well as the effect of being supported by more than one service provider.

3. Although both the BC Ministry of Education and the BC Ministry of Children and Family Development have recognized the value of various federal and provincial government ministries and community agencies working together to support children and youth with EBD in collaborative and coordinated ways, it may be beneficial to evaluate the effect of this collaborative service provision, the services provided, as well as the ways in which collaboration and coordination happen to determine if and how well the current systems work and how they could be improved.

4. The Ministry of Education endorses collaboration and involvement of other ministries and agencies to support students with EBD. It does not, however, define or describe how school systems are to collaborate with outside services on behalf of students. This makes it difficult to determine the nature of the collaboration and the effect of collaboration on the school success of these students.

5. Additional factors that may have an impact on the success rates for students identified with EBD include: reasons for using a specific service provider (e.g., addictions services or the RCMP & Restorative Justice) and socioeconomic influences (able to afford private counselling or psychology services).

4.3.14 Factors Associated with Higher than Average Rates of Success Summarized

For students identified with EBD in the Sunnyville School District for the 2007-08 school year, some factors applying to 10 or more students were most associated with successful completion of their four core courses (English, a social studies course, a mathematics course, and a science course) for students in Grades 8-11 or graduation with a BC “Dogwood” Certificate of Graduation by June 30, 2008 for students in Grade 12. Diagnoses, behaviours, and level of identification most associated with success are presented by percentage successful in Table 31. Support Services and home caregivers most associated with success are presented by percentage successful in Table 32.
### Table 31  
Student Diagnoses, Behaviours and Level of Identification Associated with the Successful Grade-to-Grade Transition and Graduation of High School Students Identified with “Behavioural Needs or Mental Illness” in the Sunnyville School District Ranked

<table>
<thead>
<tr>
<th>Factor</th>
<th>% Successful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having Tourette’s Disorder</td>
<td>58.8%</td>
</tr>
<tr>
<td>Cutting Self</td>
<td>45.5%</td>
</tr>
<tr>
<td>Bullies and/or Harasses Others</td>
<td>41.7%</td>
</tr>
<tr>
<td>Being Identified at the Moderate Behaviour/Mental Health Level</td>
<td>40.7%</td>
</tr>
<tr>
<td>Having an Anxiety Disorder</td>
<td>38.5%</td>
</tr>
<tr>
<td>Having Comorbid Attention Deficit Disorder and Anxiety Disorder</td>
<td>37.5%</td>
</tr>
<tr>
<td>Having an Attention Disorder</td>
<td>36.9%</td>
</tr>
<tr>
<td>Having a Learning Disability, Medically Diagnosed</td>
<td>36.4%</td>
</tr>
<tr>
<td>Having an Oppositional Defiant Disorder</td>
<td>35.7%</td>
</tr>
<tr>
<td>Having a Separation Anxiety Disorder</td>
<td>35.7%</td>
</tr>
</tbody>
</table>

### Table 32  
Factors Associated with the Successful Grade-to-Grade Transition and Graduation of High School Students Identified with “Behavioural Needs or Mental Illness” in the Sunnyville School District Ranked

<table>
<thead>
<tr>
<th>Factor</th>
<th>% Successful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having Received Support from a Psychologist (out of school)</td>
<td>52.2%</td>
</tr>
<tr>
<td>Having Received Support from a Speech and Language Therapist in School</td>
<td>48.0%</td>
</tr>
<tr>
<td>Having Received Support from a Counsellor (out of school)</td>
<td>46.7%</td>
</tr>
<tr>
<td>Living with Two Parents</td>
<td>45.7%</td>
</tr>
<tr>
<td>Having Received Supported from BC Children’s Hospital</td>
<td>44.8%</td>
</tr>
<tr>
<td>Having Received Support from a Pediatrician</td>
<td>42.2%</td>
</tr>
<tr>
<td>Living with a Parent and an Identified Stepparent</td>
<td>40.0%</td>
</tr>
</tbody>
</table>

### 4.4 Responding to Question Three

This section responds to the third research question:

*How does the case study evidence from the selected school district compare with literature about children and youth identified with “Behavioural Needs or Mental Illness” in populations and schools from elsewhere?*
4.4.1 Research Findings Consistent with the Literature

Some findings from the Sunnyville School District were consistent with information and research findings from elsewhere. These were as follows:

- The percentages of students identified with “Behavioural Needs or Mental Illness” in both the moderate and intensive/severe categories were consistent with those reported for students identified in these categories overall in BC for the 2007-08 school year.
- In U.S. based information, the overall cognitive ability of students with E/BD was described to be in the average to low average range (Kauffman & Landrum, 2009) and, in a series of studies, the mean full scale intelligence of students identified with E/BD ranged from 88.8 in elementary school (Mattison et al., 2006) to 90.3 and 99.0 in the secondary school samples (Mattison et al., 1998). This is similar to the overall cognitive score of 91.6 for students identified with E/BD in the Sunnyville School District for whom full scale scores were available.
- In U.S. based research, Schoenfeld and Jenny (2008) stated that the prevalence of anxiety disorders within the school E/BD population was consistent with that in the general population, and that rates of identification ranged from 6.5% to 21%. In the Sunnyville School District, 19.0% of the students identified with E/BD were identified as having been diagnosed, somewhat diagnosed or were described to have anxiety. Thus, the rate of anxiety in the Sunnyville students identified with E/BD is likely similar to that in the general population however, as anxiety was the second most common diagnosis provided or described for the students identified with E/BD in this district, it is likely that in the Sunnyville School District more students were identified with anxiety than in the U.S. based samples. Thus, it may be that although a similar proportion of students was identified with anxiety in the Sunnyville School District as existed in the general student population, there were proportionally more students with internalizing disorders identified with E/BD in the Sunnyville School District as compared to those reported in U.S. based studies.

4.4.2 Research Findings Different from the Literature

Some case study evidence from the Sunnyville School District differed from information and research findings reported elsewhere.

- Special education identification criteria for students identified in the school E/BD category in the U.S. differs from the identification criteria provided by the Ministry of Education for students with E/BD in BC. In the U.S., students deemed to be socially maladjusted are to be excluded from categorization in the ED category as students identified with E/BD unless it is determined that they also have a diagnosable emotional disturbance (U.S. Department of Education, website), whereas, in BC, the E/BD categories includes students with social problems. As well, rates of identification in the ED category in the U.S., as described in the 2006 IDEA statistics, varied from 0.24% to 1.59%, but were lower than the 2.44% of students identified with E/BD in BC for the 2007-08 school year.
• Research from the U.S. Special Education Elementary Longitudinal Study and the National Longitudinal Transition Study-2 reported that 80% of students identified with E/BD and served by school system special education programs at the elementary level, as well as 76% of students identified with E/BD and served in secondary school special education programs were male (Wagner et al., 2005). In the Sunnyville School District, 81.3% of students in Kindergarten to Grade 7 were male, a percentage consistent with the U.S. sample, but 58.3% of students indentified in the moderate E/BD category and 55.6% of students identified in the intensive/serious category (56.3% overall) in Grades 8-12 were male. This is significantly different from the 76% of males reported in the U.S. samples.

• The research literature established that students with E/BD frequently have both learning difficulties and learning disabilities (Cantwell & Baker, 1991; Fessler et al., 1991; Glassberg et al., 1999; Goldstein et al., 1985; Kauffman et al., 1987; Prior et al., 1999). Research also established that 38-75% of students identified with E/BD in the U.S. were identifiable as students with learning disabilities, and from 24-52% of students with learning disabilities were identifiable as students with clinically significant social, emotional, or behavioural problems (M. H. Epstein et al., 1994; Fessler et al., 1991; Glassberg et al., 1999; Rock et al., 1997; A. A. Silver, 1984; Wright-Strawderman & Watson, 1992). In a U.S. based study by Wagner et al., (2005), concurrent identification for learning disabilities and E/BD was maintained by 24.9% of the elementary/middle school students and by 29.9% of the secondary school students. The situation was far different in the Sunnyville School District, as 8(5.2%) of the students in Kindergarten to Grade 7 and 24(10.5%) of the students in Grades 8-12 maintained secondary identification as students with learning disabilities, although some students with E/BD in the Sunnyville School District may have been identified to the Ministry of Education in the category for students with learning disabilities. It is suggested that a considerably higher percentage of students with E/BD in the U.S. were identified with learning disabilities than were identified with learning disabilities in the Sunnyville School District.

• A number of U.S. based research studies described the language difficulties of students with E/BD. In evidence:
  o G. J. Benner et al. (2002) reported that in samples assessed, 71% of children with E/BD had expressive, receptive, and pragmatic language difficulties. In public school samples of students with E/BD, G. J. Benner et al. reported that 88% of the students had expressive language deficits, 68% had receptive language deficits, and 86% had pragmatic language deficits;
  o The American Psychiatric Association (2000) stated that expressive language disorders were a risk factor and comorbid with externalizing emotional disturbance;
  o Nelson, Benner et al. (2005) reported that in samples of Kindergarten to Grade 12 students, 68% met criteria for language deficits, particularly in the expressive area; and
Bain (2000) reported that individuals with attentional deficits had difficulty in expressive language activities related to social competency and other behaviours. Thus, although the U.S. based research described that most students with E/BD had language based issues, in the Sunnyville School District, speech and language services had been received by 53(13.8%) of the students identified with E/BD at some time in their lives. This indicates a lower service level than needs identification but it may also indicate a difference between the identified needs in the U.S. based samples as compared to the E/BD population in the Sunnyville School District.

- Tourette’s disorder is expected to have a prevalence of 0.1% in children and youth such that it causes significant symptoms and significant impairment (Wadell & Shepherd, 2002). Thus, out of an expected prevalence of 15 or 16 students in the entire Sunnyville School District, there were 20 students who had formally been diagnosed with Tourette’s disorder and 2 other students for whom this diagnosis was probable in students identified with E/BD in the Sunnyville School District.

- A review of the psychiatric and psychological literature for empirical studies dealing with the comorbidity of attention deficit disorders with other disorders by Biederman et al. (1991) found that attention deficits and conduct disorders were comorbid for at least 30-50% of the population and that attention deficits and opposition disorders were comorbid for at least 35% of the population. In the Sunnyville School District, of students identified with E/BD, attention deficits were comorbid for students diagnosed or described to have a conduct disorder for only 4% of the population, and 32% of students with attentional issues also had an opposition disorder. In a study by Chavira et al. (2008), attention issues were comorbid with conduct/opposition behaviours for 35.7% of the population studied. Although in the Sunnyville School District, comorbidity between attentional issues and conduct disorders was not high, the comorbidity between attentional issues and oppositional disorders was found.

- In the U.S., Wagner et al. (2006) stated that 7 out of 10 students classified with E/BD attended general education schools in their neighbourhoods but that elementary school students with E/BD were less likely to go to neighbourhood schools. In contrast, in the Sunnyville School District, all students identified with E/BD in Kindergarten to Grade 7 were educated in their neighbourhood schools or they attended a neighbourhood school of their choice.

- In the U.S. based literature, students with E/BD experienced high rates of academic underachievement (Levy & Chard, 2001) as well as course and grade failure (Wagner and Blackorby, 1996). Although exact grades were not collected for the students identified with E/BD in the Sunnyville School District, 11% of students identified in the intensive/serious category failed English 10, but by Grade 12, no students with E/BD failed either Communications 12 or English 12. In mathematics, 14% of students identified in the moderate category had not passed Essentials of Mathematics 10. Science 10 was more problematic as 21% of students identified in the intensive/serious category and 17% of students identified in the moderate category had not passed their mathematics course. Thus, it appears that the nature of some government examinable courses was more difficult for students with E/BD in
the Sunnyville School District but that rates of course failure appeared to differ from the information in the U.S. based study. It may be that students with E/BD in the Sunnyville School District did not fail courses; they simply failed to complete them, especially in Grades 10-12.

- Trout, Nordness et al. (2003) stated that they expected that students identified earlier who received services may have had different patterns of academic functioning from those who were identified in later grades, either because of the support received earlier or because their behavioural issues were more severe and, because of the severity of their issues, they may have had more learning issues. In the Sunnyville School District, students who were first identified with E/BD in elementary school were more successful than students who were first identified with E/BD in high school as 38.0% of students who had been identified in Kindergarten to Grade 7 had successfully completed their four core courses by June 30, 2008 in comparison to the 32.3% of the students who were first identified with E/BD in the Sunnyville School District in Grades 8-12 who had successfully completed their four core courses by June 30 of that year. Whereas it may be thought that later emerging behaviour difficulties may have less of an effect on learning, and that students who had experienced behaviour challenges for a longer period of time would be more affected by them, it may be that early intervention mediated for academic weaknesses and the earlier intervention was effective in the Sunnyville School District.

- Although the literature suggested that some combinations of diagnoses were more problematic than others (Gresham et al., 2000), and that more students with comorbid disorders may drop out of school (Cullinan and Epstein, 2001), information from the Sunnyville School District indicated that 37.5% of students identified with comorbid attentional issues and anxiety successfully completed their four core courses or graduated with a “Dogwood” Certificate of Graduation by June 30, 2008, a rate higher than the overall mean of 35.5% reported for students identified with E/BD in Grades 8-12, whereas 31.6% of students with identified or described anxiety and depression met this study’s criteria for success, a percentage lower than that reported overall for the Sunnyville students. Thus, this study confirmed that students with some comorbid disorders, such as comorbid attentional issues and anxiety, were more successful than others.
5: SUMMARY AND DISCUSSION

This final chapter restates the research problem, reviews the methodology used, gives an overview of the literature reviewed, and summarizes the main findings of the research, describing how the findings compare to the literature reviewed from elsewhere. Recommendations for educators are provided. As well, suggestions for further research are provided.

5.1 Statement of the Problem

Students identified with E/BD are recognized in BC and elsewhere for their learning difficulties; academic underachievement; poor skill levels; course and grade failure; school noncompletion; as well as for the difficulties school systems have in engaging, teaching, and maintaining them in school. Their poor educational and post school outcomes have been identified as a crisis in education.

In BC, The Ministry of Education has established 12 special education categories, 2 of which are for students with emotional and/or behavioural disorders for students with a “Behavioural Needs or Mental Illness” designation (E/BD). Within this designation, students who need and receive a moderate level of support are described as “Students Requiring Moderate Behaviour Support or Students with Mental Illness” (moderate E/BD category), and students who need and receive a more advanced level of additional support are described as “Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness” (intensive/serious E/BD category). The BC Ministry of Education stated that for the 2007-08 school year, 30% of students who were categorized with E/BD graduated with the BC “Dogwood” Certificate of Graduation, having completed their five-year graduation program within six years (2008). This was compared to the 83% of students without special needs reported for that same year who successfully graduated with the BC “Dogwood” Certificate of Graduation within six years of their entry to Grade 8 (BC MoE, website). In the district selected for this study, given the pseudonym “Sunnyville School District”, 29% of students who were categorized with E/BD graduated with the province’s “Dogwood” Certificate of Graduation for the 2007-08 school year, having completed their five-year graduation program within six years. This was compared to the 75.5% of students in the Sunnyville School District without special needs who successfully graduated with the BC “Dogwood” Certificate of Graduation within six years, for the 2007-08 school year (BC MoE, website).

This study sought to understand the characteristics of students identified with E/BD in a selected school district, the nature of the difficulties they had in achieving academic success, and factors associated with their successful grade-to-grade transition in high school from Grades 8-11 and school completion with the BC “Dogwood”
Certificate of Graduation for students in Grade 12, in order to provide school leaders with information to improve the educational success of these students. The findings were then compared with literature about children and youth identified with E/BD in populations and schools from elsewhere to find similarities and differences as well as to fill gaps in knowledge, provide recommendations, and provide direction for further research.

5.2 Review of the Methodology

This study used a mixed methods case study methodology to examine the cases of the 384 students identified with E/BD in the Sunnyville School District on May 30, 2008 from information held at the district support services office. The study was bounded by analyzing information about students designated with E/BD on one particular date, May 30, 2008, who were enrolled in one district in BC. File reviews were completed for each of the 384 students using a set format in order to complete a multiple case study. From the file reviews, comparative charts and grids of factors were developed. For the 229 students in Grades 8-12, pass rates on their four core courses (English, a social studies course, a mathematics course, and a science course) or their graduation from high school based on data available as of June 30, 2008 were collected and added to the file reviews. The information collected was coded and inputted into a Microsoft Excel spreadsheet. In order to maintain statistical accuracy, consultation and services were received from the Simon Fraser University Surrey Statistical Consulting Service. This service reviewed the anonymous computer data set and developed tables of students who had successfully completed their four core courses or had graduated with a BC “Dogwood” Certificate of Graduation by June 30, 2008 with those students in Grades 8-12 who had not successfully met these criteria. The two groups were compared for a list of factors in order to establish some factors associated with successful grade-to-grade transition and graduation of students with E/BD. Where possible, the research findings were compared with findings in the literature.

Three general themes were identified from the readings and from the information collected in the file reviews for the literature review. These themes placed the students’ lives against the contexts of their lives over time, in what Uri Bronfenbrenner described as an ecological system. The themes were:

- the characteristics of children and youth with E/BD in community, clinical, and school populations;
- the family and community factors that have an impact on the learning and academic success of students with E/BD; and
- the learning and achievement of children and youth with E/BD, as well as factors and interventions associated with their academic success or lack of success.

A comparative process was then used to find the similarities and differences between information collected from the file reviews of the 384 students identified with E/BD on May 2008 in the Sunnyville School District and the 229 students in Grades 8-12 who were and were not successful in passing their four core courses (English, a social
studies course, a mathematics course, and a science course) or in graduating from high school based on data available as of June 30 with the research literature in order to provide the study’s recommendations and direction for further research.

5.3 Background from the Literature

Schools, parents, and communities have a responsibility to help all children and youth develop the qualities and assets that they need to become independent and healthy adults. This responsibility includes helping all children and youth increase their biological, psychological, cognitive, and social capacities as well as their resources and resiliency to cope with growing up so that they can successfully deal with their day-to-day lives. Some children and youth do not have good mental health. These children and youth can be said to have experienced successively poor adaptational failures. These adaptational failures can lead them towards a mental health disorder, and the longer they adapt poorly, the more unlikely it is that they will return to mental health. Determining how many children and youth lack mental health is complex, as mental health exists on a continuum from those individuals who are mentally healthy to those individuals who are at significant risk in all contexts, and therefore, it is important to understand that the prevalence of E/BD in children and youth depends on the age, method, and criteria used to select and identify the subjects used to determine prevalence. If significant impairment at home, at school, and in the community are considered, then approximately 6-14% of children and youth can be said to have an emotional or behavioural disorder.

The nature of the problems experienced by children and youth with E/BD is also complex to describe. Many problems are more common at some ages than at other ages, and some problems present differently in males than in females; however, the majority of children and youth with an identified mental health disorder will have more than one disorder. Although mental health problems/disorders occur in children and youth of all ages, more youth in high school are identified by schools as students with E/BD than are children in elementary school. The problems or disorders children and youth have are often described as being internalizing or externalizing and many individuals experience both.

As schools are the place children and youth spend much of their time, it is clear that schools have a role in providing intervention to address both the emotional and behavioural concerns of students with E/BD as well as their learning needs; however, schools cannot intervene alone as they share this responsibility with families and communities. The literature reviewed for this study described the impact of family factors on children and youth with E/BD. The literature reported that families with two parents were associated with the best outcomes for children and youth for reasons such as higher levels of parental involvement and higher socioeconomic status. Although some children and youth with E/BD were found to live in two-parent families, many were found to live in one-parent families or “in care”. One-parent families were most often headed by mothers, were often poor, and were associated with more permissive parenting and less monitoring of homework. Some children and youth undergo family
disruption from a parent’s death, from divorce, or from remarriage. The literature reported that children and youth from these homes presented with lower rates of well-being and higher levels E/BD. Children and youth with E/BD sometimes resided “in care”. These children and youth were reported to have had difficult family backgrounds before they were removed from their parents, and more than half of the children and youth “in care” were reported to experience mental health problems. Many, as well, were found to experience academic lags and did not graduate from high school.

Parenting children and youth with E/BD was described as frequently being lifelong and difficult for parents. Challenges included familial mental health issues; stress related to raising a child or youth with E/BD; and the extra responsibilities expected of these parents to support their child or youth at home, at school, and in the community. Each of these challenges was described to have a significant impact on a family’s functioning. These challenges often resulted in caregiver strain.

Many parents of children and youth identified with E/BD experienced their own challenges in addition to the challenge of raising a child or youth with E/BD. Parent attributes and actions that were found to impact children’s outcomes negatively included:

- poverty issues;
- family transitions (e.g., moves; family composition changes);
- lower levels of parent involvement in children’s lives;
- lower parent education levels;
- parent problems including abuse to their children, mental health problems, and substance abuse problems;
- parenting practices characterized by criticism, inconsistency, and a lack of warmth;
- permissive parenting practices; and
- exposure to parental violence.

Family poverty, particularly long term poverty, was found to be a risk factor for E/BD, academic problems, and learning difficulties for children and youth. Some parent attributes and actions were found to impact children’s outcomes positively. These included:

- the giving of love, guidance, care, support, and nurturance;
- higher parent education levels;
- being of higher socioeconomic status; and
- higher parent involvement in the education of their children at home and at school.

Parent involvement at home that was found to be beneficial included: teaching children, working on homework with them, and supervising their homework completion when they were younger; helping children and youth when parents had particular expertise in an area; discussing learning, educational plans, and school related topics with their children; as well as providing their children with encouragement and support. The literature placed particular emphasis on the benefits of parent involvement at school, particularly from mothers, which occurred most when parents were welcomed by schools and when parents believed that their involvement was beneficial. Parents who were more involved at school were found to have children with better academic success,
more positive attitudes towards school, improved homework habits, lower absenteeism, and decreased rates of school dropout. Although parents were found to be less involved with their children’s education at school when their children were in high school, parents continued to be involved in their children’s education in many ways including through their influence, beliefs, and actions, as well as through their involvement at home. Parental involvement in the community through collaborative relationships on behalf of their child or youth was found to be beneficial for children and youth with E/BD. These collaborative relationships that supported the children and youth also benefited the members of the teams, the organizations involved with them, as well as the individuals’ families.

The collaborative approach often recommended to support children and youth identified with E/BD, commonly called a system of care approach, was developed to provide a comprehensive, integrated way of involving agencies and professionals with the child and the family. Two models using this approach are named wraparound and integrated case management. The wraparound model is a strengths based approach that involves the family in decision making for their child in all contexts of their child’s life. Integrated case management is a team approach to supporting individuals in the identification and achievement of their goals with the individual directing his/her own life as much as possible.

According to the BC Ministry of Education, the role of schools in BC is to provide all students with an “equitable access to learning, opportunities for achievement and the pursuit of excellence in all aspects of their educational programs” (website). The Ministry also states that students with E/BD have special needs and are to receive special education programs and services to attain equitable access to learning, opportunities for achievement and the pursuit of excellence in all aspects of their educational programs (website). As behaviour and learning are related and affect school success, schools need to address both. In fact, many of the recommendations reported in the literature to improve the behaviour of students with E/BD were through academic interventions. Conversely, if students were not able to behave in order to learn, they were not able to be maintained in inclusive settings and had difficulty learning.

The learning of students with E/BD was found to be influenced by many factors. The research suggested that students with E/BD had average to low average cognitive ability with numerous cognitive weaknesses associated with their learning. Although information varied in the percentages given, the literature described that most students identified with E/BD also had some form of speech and/or language deficit; many had attentional difficulties; and many had learning disabilities (both diagnosed and undiagnosed). In general, students with E/BD were found to have wide ranging academic difficulties in reading, mathematics, spelling, and writing that increased as they progressed through school. As a result of their cognitive and academic difficulties, and because they exhibited unhelpful responses in their learning such as learned helplessness, unhelpful thinking patterns, and a lack of engagement, these students did poorly in school. In high school, they often found the higher academic demands and high school learning environment difficult. They often also lacked the academic and
social skills to work well alone, with peers, and with teachers. As a result, many students with E/BD progressed towards school noncompletion or failure. They also experienced poor postschool outcomes in many areas including failure in postsecondary education and in employment.

5.4 Summary of the Results

5.4.1 Question One

The first question addressed in this study was:

What is known about the identity of students, in the school district utilized for this study, who are identified with “Behavioural Needs or Mental Illness” at the two levels of severity: “Students Requiring Moderate Behaviour Support or Students with Mental Illness”; and, “Students Requiring Intensive Behaviour Intervention or Students with Serious Mental Illness”?

In Sunnyville, an area in BC, the most recent information from Statistics Canada indicated that the incidence of low income families receiving income assistance was 11.1% compared to 13.3% overall in BC, and the graduation rate for 18 year olds was 81.7% as compared to 73.8% overall in BC (2006). In the Sunnyville School District, 90.88% of students spoke English in their homes and 10% of the students had ethnic minority origins. The Ministry of Education reported that for the 2007-08 school year, 75.5% of students without special needs graduated from the district’s public high schools with a “Dogwood” Certificate of Graduation and that 29% of students identified with “Behavioural Needs or Mental Illness” graduated with this certification having completed their five-year graduation program within six years. On September 30, 2007, the Sunnyville School District reported to the Ministry of Education a total of 15,358 students, 1353 of whom were identified with special needs. For the 2007-08 school year, the district reported to the Ministry of Education that 2.42% of the total student enrolment and 26.98% of students identified with special needs were identified with E/BD. Half of the students with E/BD were identified in the intensive/serious category and half were identified in the moderate category.

On May 30, 2008, the date selected for analysis of the students identified with E/BD in the district chosen for this study, the district identified for Ministry of Education purposes, 384 students as students with special needs with “Behavioural Needs or Mental Illness”, 155 of whom were in Kindergarten to Grade 7 and 229 whom were in Grades 8-12. Of the high school students identified with E/BD in Grades 8-12, 173(75.5%) attended the district’s 6 neighbourhood high schools, 55(24.0%) attended the district’s 2 alternate schools, and 1 student was unassigned to a school. Between September 30, 2007 and May 30, 2008, the headcount numbers had changed in a number of ways. The number of students identified in the moderate category had increased by 20 students, and the number of students identified in the intensive/serious
category had decrease by 1 student. During the 8 months, in the moderate category, 29 students had been added to the category (18 were newly identified; 9 were previously identified in the intensive/serious category; 7 had been removed from the category list). During the 8 months, in the intensive/serious category, there was a decrease of 1 student in the category (25 students were newly identified; 9 students were now identified in the moderate category; 17 students had been removed from the category list).

For the 384 students identified with E/BD in the Sunnyville School District on May 30, 2008:

- There were more students identified with E/BD in each grade from Grades 8-11 of high school than in each grade from Kindergarten to Grade 7. This increase in high school was both in number and percentage of students.
- There were more students identified with E/BD in Grade 9 than in any other grade, both in number and in percentage of students.
- The number of students identified in the moderate category increased in Grade 7 and remained at a higher level through to Grade 12.
- Whereas in Kindergarten to Grade 3, males were identified with E/BD at a rate 4.6 times that of females, in Grades 4-7 males were identified with E/BD at a rate 4.4 times that of females, and in Grades 7-12, males were identified at a rate 1.3 times greater than of females.
- There were more females than males identified with E/BD in Grade 10, the result of more females having been identified in the moderate category.
- Students were first identified with E/BD during each and every grade from before they entered school through to Grade 12 although identification prior to Kindergarten and in Grades 11 and 12 was far less common. First identification for students currently identified in the moderate category peaked in Grades 4, 5 and 9, whereas first identification for students currently identified in the intensive/serious category peaked in Grades 7, 8, and 9.
- Overall, on May 30, 2008, 51.5% of students had been identified with E/BD for 2 or fewer years.
- Being changed from one behaviour category to the other (moderate to intensive/serious or serious/intensive to moderate or a combination of these patterns) had occurred for 19.5% of the students with E/BD in the Sunnyville School District. It was more common to be changed from the moderate category to the intensive/serious category (46 students) than from the intensive/serious category to the moderate category (29 students). Of students who had changed from being identified in the intensive/serious category to being identified in the moderate category, 17 out of the 23 were in Grades 10-12 suggesting either a trend towards improvement in the upper grades of high school and/or the absence of previously experienced community support for some of the students identified with E/BD in these grades.
• Overall, 10% of students with E/BD were also identified as having a learning disability, 4.2% of these students were identified in the moderate category and 16.1% were identified in the intensive/severe category.

• Identification with a learning disability occurred prior, concurrently and subsequent to identification with E/BD, however, the most common pattern was being identified with a learning disability prior to being identified with E/BD.

• Students who were identified as gifted were identified with E/BD at a rate similar to the rate of identification in the general population.

• Speech and language services had been received at some time by 13.8% of students identified with E/BD (17.9% of those in Kindergarten to Grade 3; 18.2% of those in Grades 4-7; and 10.2% of those in Grades 8-12). Students identified with E/BD in Grades 8-12 were less likely than students in Kindergarten to Grade 7 to have received speech and language services.

• Occupational Therapy services had been received by 25(7%) of the students identified with E/BD.

• Physical therapy services had been received by 3(1%) of the students identified with E/BD.

• Approximately one third of the students identified with E/BD had received an assessment of their cognitive ability. Of this group, their overall mean cognitive ability score was 91.6, their mean verbal ability score was 93.4, their mean perceptual reasoning/nonverbal ability score was 94.5, their mean processing speed score was 93.3, and, their mean working memory score was 91.4. This suggested that the mean cognitive ability of students with E/BD fell in the average range; however, the overall mean cognitive ability score of 91.6 in this population was lower than the overall mean cognitive ability score of 100 in the general population.

• In order of prevalence, the top 10 disorders for all students identified with E/BD in the Sunnyville School District by percentage of students identified with E/BD with the disorders (diagnosed or described) were:
  o attention deficit disorder (29.9%);
  o anxiety disorder (19.0%);
  o oppositional defiant disorder (13.8%);
  o depression (10.7%);
  o drug problems (8.3%);
  o suicidal ideation (6.3%);
  o Tourette’s disorder (5.7%);
  o obsessive-compulsive disorder (5.5%);
  o separation anxiety disorder (4.9%); and
  o FASD/neonatal abstinence syndrome (4.7%).

• In order of prevalence, the top 12 disorders for all students identified with E/BD in the Sunnyville School District by percentage of students identified with E/BD with the disorders (diagnosed or described) in Kindergarten to Grade 7 were:
  o attention deficit disorder (32.3%);
  o oppositional defiant disorder (16.1%);
- anxiety disorder (13.54%);
- obsessive–compulsive disorder (7.1%);
- developmental coordination disorder (5.8%);
- FASD/neonatal abstinence syndrome (4.5%);
- autistic disorder (4.5%);
- written output disorder (3.9%);
- attachment disorder (3.9%);
- Tourette’s disorder (3.2%);
- separation anxiety disorder (3.2%); and
- encopresis (3.2%).

- In order of prevalence, the top 10 disorders in students identified with E/BD in the Sunnyville School District by percentage of students identified with E/BD with the disorders (diagnosed or described) in Grades 8-12 were:
  - attention deficit disorder (28.4%);
  - anxiety disorder (22.7%);
  - depression (17.5%);
  - drug involvement (14.4%);
  - oppositional defiant disorder (12.2%);
  - suicidal ideation (9.2%);
  - Tourette’s disorder (7.4%);
  - separation anxiety disorder (6.1%);
  - alcohol involvement (5.7%); and
  - posttraumatic stress disorder (5.2%)

- As compared to expected prevalence as prepared for the British Columbia Ministry of Children and Family Development by Waddell and Shepherd (2002) for disorders that affected them and caused them to have significant symptoms and significant impairment:
  - approximately 3.3% of children and youth in the Sunnyville School District would be predicted to have an attention-deficit/hyperactivity disorder. Based on this percentage, 22.6% of students expected to be diagnosed with an attention deficit disorder in the Sunnyville School District were identified as a student with E/BD;
  - approximately 6.5% of children and youth would be predicted to have an anxiety disorder in the Sunnyville School District. Based on this percentage, 0.56% of students expected to be diagnosed with an anxiety disorder in the Sunnyville School District were identified as a student with E/BD;
  - approximately 3.3% of children and youth would be predicted to have a conduct disorder in the Sunnyville School District. Based on this percentage, 13.8% of the students who had been diagnosed with or who had been described to have had the characteristics of an oppositional defiant or conduct or disruptive behaviour disorder were identified as students with E/BD;
o approximately 2.1% of children and youth would be predicted to have an depressive disorder in the Sunnyville School District. Based on this percentage, 12.9% of students predicted to have a depressive disorder were identified as students with E/BD. Consistent with the literature (Dubow, Loyko, and Kausch, 1990), most students who had been diagnosed with or who had been described to have the characteristics of depression or dysthymia were older (40 out of 41 identified with a depressive disorder were in Grades 8-12);

o approximately 0.1% of children and youth in the Sunnyville School District would be predicted to have Tourette’s disorder. In the Sunnyville School District, there were 22 students identified with E/BD in the district who had been diagnosed or described to have had Tourette’s disorder. This suggests that more students with E/BD who were identified with Tourette’s disorder that caused them significant impact than were expected in the entire district. It may be that these students were identified with other disorders that were significant but they also had comorbid Tourette’s disorder that did not have a significant enough impact on them such that it would have been reflected in the prevalence rates reported by Waddell and Shepherd.

o Approximately 0.2% of children and youth in the Sunnyville School District would be predicted to have an obsessive-compulsive disorder.

o As compared with the expected prevalence rates reported by Waddell and Shepherd, approximately 67.7% of children and youth expected to have an obsessive-compulsive disorder in the district had been identified a student with E/BD.

- 10.2% of the students identified with E/BD in the Sunnyville School District were described to have or to have had a substance abuse issue;

- although the McCreary Report (2003) stated that 10% of females and 4% of males in Grades 7-12 in BC had attempted suicide, in the Sunnyville School District, only 24(6.3%) of students identified with E/BD were described to have presented at one time with suicidal ideation;

- Comorbidity rates for students identified with E/BD in the Sunnyville School District were as follows:
  o 4% of students had been diagnosed with or had been described to have had both an attention disorder and a conduct disorder and 32% of students had been diagnosed with or who had been described to have had both an attention and an oppositional disorder. This is compared to the 35.7% of children and youth who presented with conduct/oppositional behaviours and ADD in a study by Bird et al. (1993);
  o 28% of the students who had been diagnosed with or who had been described to have had an attention disorder had also been diagnosed with or had been described to have had an anxiety disorder. This is compared to the 50.8% of children and youth who presented with these comorbid disorders in the study by Bird et al.;
11% of the students who had been diagnosed with or who had been described to have had an attention disorder had also been diagnosed with or had been described to have had a depressive and/or a dysthymic disorder. This is compared to the 26.8% of children and youth who presented with these comorbid disorders in the study by Bird et al.;

22% of the students who had been diagnosed with or who had been described to have had an anxiety disorder and/or a separation anxiety disorder had also been diagnosed with or had been described to have had a depressive disorder or dysthymia. This is compared to the 13.2% of children and youth who presented with these disorders in the study by Bird et al.;

1 student had been diagnosed with or had been described to have had an anxiety, a separation anxiety, and a conduct disorder;

2.1% of students who had been diagnosed with or who had been described to have had an anxiety disorder had also been diagnosed with or had been described to have had an oppositional defiant disorder. This is compared to the 62.4% of children and youth in the study by Bird et al. who were diagnosed or described to have these disorders; and

2 students who had been diagnosed with or had been described to have had a depressive disorder or dysthymia had also been diagnosed with or had been described to have had a conduct disorder and 3 students who had been diagnosed with or had been described to have had a depressive disorder or dysthymia had also been diagnosed with or had been described to have had an oppositional defiant disorder. This is in comparison to the 82.2% of children and youth in the study by Bird et al. who presented with these comorbid disorders;

The most commonly described behaviours for students identified with E/BD in the Sunnyville School District in order of prevalence were:

- verbal aggression (swearing, threatening, yelling, arguing);
- physical aggression, physically showing anger;
- truancy;
- non compliance, rule breaking, disobedience, defiance;
- fighting, assault;
- poor socialization, being isolated;
- off task, short attention span, hyperactive;
- sexualized behaviours (e.g., inappropriate touching or drawings);
- hitting; and
- impulsive behaviours.

The most commonly described behaviours for students identified with E/BD in the Sunnyville School District who were in Kindergarten to Grade 3, in order of prevalence were:

- physical aggression, physically showing anger;
- hitting;
- verbal aggression (swearing, threatening, yelling, arguing);
• poor socialization, being isolated;
• off task, short attention span, hyperactive;
• impulsive behaviours;
• kicking; and
• sensory issues.
• The most commonly described behaviours for students identified with E/BD in the Sunnyville School District who were in Grades 4-7, in order of prevalence were:
  • physical aggression, physically showing anger;
  • verbal aggression (swearing, threatening, yelling arguing);
  • impulsive behaviours;
  • poor fine motor skills;
  • noncompliance, rule breaking, disobedience, defiance;
  • hitting; and
  • tantrums.
• The most commonly described behaviours for students identified with E/BD in the Sunnyville School District who were in Grades 8-12, in order of prevalence were:
  • often absent, truancy a problem;
  • verbal aggression;
  • fights, assaults others;
  • noncompliant, rule breaks, disobedient, defiant;
  • sexualized behaviours (e.g., inappropriate touching or drawings);
  • theft issues, steals;
  • poor socialization, isolated;
  • bullies, harasses others;
  • fire starting issues;
  • cuts self; and
  • disruptive behaviours.
• 4% of high school students in the Sunnyville School District attended the district’s two alternate schools and on May 30, 24% of the students identified with E/BD in high school received their education in alternate schools.
• The parenting profiles of students with E/BD in the Sunnyville School District by category and overall were:
  • families headed by 2 parents or a parent and a stepparent
    • moderate E/BD category-50%;
    • intensive/serious E/BD category-32.3%;
    • overall E/BD-40.9%;
  • families headed by a mother only
    • moderate E/BD category-29.2%;
    • intensive/serious E/BD category-29.2%;
    • overall E/BD-29.2%;
  • families headed by a father only
    • moderate E/BD category-6.8%;
    • intensive/serious E/BD category-4.7%;
    • overall E/BD-5.7%;
- students who received alternating parent care
  - moderate E/BD category-1.0%;
  - intensive/serious E/BD category-1.6%;
  - overall E/BD-1.3%;
- families headed by a grandparent or grandparents
  - moderate 4.2%;
  - intensive/serious 8.9%;
  - overall 6.5%;
- families headed by other relatives
  - moderate E/BD category-0.0%;
  - intensive/serious E/BD category-0.5%;
  - overall E/BD-0.3%;
- students “in care”
  - moderate E/BD category-6.8%;
  - intensive/serious E/BD category-21.4%
  - overall E/BD-14.1%; and
- students in temporary and transitory living situations including shelters and safe houses
  - moderate E/BD category-0.5%;
  - intensive/serious E/BD category-1.0%;
  - overall E/BD-0.8%).

- The percentage of students living “in care” was 6.8 times higher in the moderate E/BD category and 21.4 times higher in the intensive/serious E/BD category than described for all children and youth in BC (BC Office of the Provincial Health Officer, 2006).

- Some students had experienced high numbers of caregivers. Eleven students had experienced 4 or more home placements; 1 high school student had experienced 7 placements “in care” between birth and age 5; another high school student had experienced at least 14 placements.

- Some students had attended numerous schools. For students identified with E/BD in Kindergarten to Grade 3, 8 students had attended 2 or more schools; in Grades 4-7, 12 students had attended 3 or more schools (one student in Grade 5 had changed schools 11 times); in Grades 8-12, 26 students had attended 5 or more schools (1 student had attended 11 schools; another student had attended 12 schools).

- The most commonly experienced community based service provider was the Ministry of Child and Family Development (27.3% of students with E/BD had been supported by a social worker; 26.8% had been supported by a mental health therapist; 11.9% had been supported by both; 48.2% of all students with E/BD had been supported by the Ministry of Child and Family Development).

- A higher percentage of students in Kindergarten to Grade 7 who were identified with E/BD had been or were being supported by a Ministry of Child and Family Development mental health therapist (27.7%) than a Ministry of Children and Family Development social worker (25.2%); whereas a higher percentage of
students in Grades 8-12 had been supported by a Ministry of Child and Family Development social worker (28.8%) than Ministry of Child and Youth mental health therapist (25.8%).

- A pediatrician had been seen by 36.8% of students in Kindergarten to Grade 7 who were identified with E/BD in comparison to 19.7% of the students identified with E/BD in Grades 8-12 who had seen a pediatrician.
- Additional services beyond those required in the school system for students with E/BD most often received, in order of prevalence were:
  
  - Ministry of Children and Family Development social worker (27.3%);
  - Child and Youth mental health therapist (26.8%);
  - paediatrician (26.6%);
  - BC Children’s Hospital (26.0%);
  - speech and language services (13.8%);
  - psychologist (private or hospital or community service) (10.9%);
  - Child and Family Services Society (housing, education, support and counselling, particularly for life trauma) (9.9%);
  - RCMP & Restorative Justice (9.1%);
  - Community Service Society (multi-service, non-profit society) (6.8%) and a
  - psychiatrist (6.5%);

- For the 2007-08 school year, the majority of students with E/BD in the Sunnyville School District who completed government examinable courses did pass them. The lowest pass rates were by students in the moderate category in Social Studies 11 (76%) and by students in the intensive/serious category in Science 10 (79%).
- Although grade-to-grade transition information stated that all students with E/BD transitioned successfully from Grade 6 to higher and district information informed that all students from Grade 7 transitioned successfully into Grade 8, information from the Sunnyville School District indicated that in each year of high school, progressively fewer students transitioned successfully to the next grade.

### 5.4.2 Question Two

Once the identity construct of students identified with E/BD in the selected school district was developed, the following question could be answered:

*What individual, family, community, and school factors are associated with the successful grade-to-grade transition and graduation of students identified with “Behavioural Needs or Mental Illness” for special education purposes, in Grades 8-12, in a suburban school district in British Columbia, Canada?*

For the purpose of this study, students identified with E/BD in Grades 8-12 were considered to have successfully grade-to-grade transitioned when they had successfully
passed each of their core subjects (English or Communications; Social Studies, First Nations Studies or Civic Studies; Mathematics Essentials or Mathematics Applications or Mathematics Principles; and, a science course) by June 30, 2008 or they had graduated, having completed the BC “Dogwood” Certificate of Graduation by June 30, 2008. Based on these criteria, for students identified with E/BD in Grades 8-12 in the Sunnyville School District:

- 35.4% of the students in Grades 8-12 were successful in grade-to-grade transitioning or graduating from high school based on the established criteria for success and 64.6% were not.
- 42.1% of the Grade 8 students identified with E/BD met the study’s criteria for success. Of the students in Grade 8 who were not successful, 39.5% had failed 1 or more courses. The other students identified with E/BD in Grade 8 were gone from the system, or were in alternate programs and had not completed their four core subjects over the school year. Three students were enrolled in modified programs.
- 35.0% of the Grade 9 students met the study’s criteria for success. Of the students who were not successful, 44.1% had failed one or more courses. Others were gone from the system, or were enrolled in alternate programs and had not completed their four core subjects over the school year. As well, 1 student was in a regional Youth Day Treatment Program, 1 student had been placed on a modified program, and 1 student had been placed on a “no marks given” program.
- 31.5% of the Grade 10 students met the study’s criteria for success. Of the students who were not successful, it became difficult to determine whether they had failed these courses or had not completed them successfully. Some students were gone from the system, 1 student was enrolled in no courses, and another student was enrolled on a “no marks given” basis. Of the 20.4% of students in Grade 10 who were in alternate programs, none had completed each of his/her four core subjects over the school year. Four students were enrolled in modified programs.
- 42.2% of the Grade 11 students met the study’s criteria for success. The pattern for the Grade 11 students identified with E/BD who were not successful was similar to that for the Grade 10 students except that no students in Grade 11 were enrolled in modified programs.
- 24.2% of the Grade 12 students met the study’s criteria for success by graduating with a BC “Dogwood” Certificate of Graduation based on completion of all required courses by June 30, 2008. Of the successful graduates:
  - each was born in 1990, making it probable that none had been grade retained;
  - 4 were male and 4 were female;
  - 3 were also identified as students with learning disabilities;
  - 6 were identified in the moderate E/BD category and 2 were identified in the intensive/serious E/BD category;
  - 3 lived with both parents; 4 lived with a mother only and 1 lived “in care”;
  - 4 were placed on “no marks given programs.”
By June 30, 2008, 4 of the students had been identified for less than 2 years; 1 student had been identified for 3 years; 1 student had been identified for 8 years and 1 student had been identified for almost 11 years. Information on length of identification was not located for 1 student;

Of the unsuccessful students 5 were enrolled in modified programs.

- 37.2% of males and 33.0% of females were successful in completing their four core subjects or in graduating with a “Dogwood” Certificate of Graduation by June 30, 2008.
- 40.7% of students identified in the moderate category and 30.6% of students identified in the intensive/serious category were successful in completing their four core subjects or in graduating with a BC “Dogwood” Certificate of Graduation by June 30.
- 38.0% of students who were first identified with E/BD in elementary school and 32.3% of students who had first been identified with E/BD in high school met the study’s criteria for success.
- 2 of the 4 students identified as gifted met the study’s criteria for success.
- 30.3% of students identified as having a learning disability met the study’s criteria for success.
- Of students who had received additional services at school, both of the 2 students who had received occupational therapy; 3 of the 6 students who had received art therapy; and 12 of the 25 students who had received speech and language services met the study’s criteria for success.
- For students with specific behaviour disorders, the higher rates of success (as defined in the study) by disorder (diagnosed or described) were achieved by students with the following: Tourette’s disorder (58.8%); anxiety disorder (38.5%); ADHD (36.9%); learning disabilities (medically diagnosed) (36.4%); fetal alcohol spectrum disorder/neonatal abstinence syndrome (35.8%); separation anxiety disorder (35.7%); and oppositional defiant disorder (35.7%). The lowest rates of success by disorder (diagnosed or described) were achieved by students with the following: posttraumatic stress disorder (33.3%); sexual abuse of child (33.3%); parent-child relationship problems (30.0%); suicidal ideation (26.6%); drug involvement (27.3%); attachment disorder (25.0%); and, alcohol involvement (7.7%).
- Of behaviour descriptions used for 10 or more students, only students who cut themselves (45.5%), and students who bullied or harassed others (41.7%) were more successful than the mean rate of success using the criteria for success set in this study. Of behaviour descriptions used for 10 or more students, those who were 0-10% less successful using the criteria set in this study were described as having:
  - sexualized behaviours (31.3%);
  - high numbers of absences or high rates of truancy from school (26.7%); and
  - fought or assaulted others (26.1%).
Of behaviour descriptions used for 10 or more students, those students who were 11-31% less successful, using criteria set in this study, were described as having:
- poor socialization/being isolated (23.1%),
- being noncompliant, breaking rules, being disobedient and/or being defiant (19.0%);
- not getting work done and/or having work refusal issues (10.0%).
- The only student in a French Immersion program had failed all courses.
- No students who attended the district’s two alternate schools met this study’s criteria for success.
- Only 1(9.1%) student who had experienced 4 or more home placements met this study’s criteria for success. This student had received a number of courses delivered individually in a support room.
- 2 (7.7%) of the 26 students who had attended 5 or more schools met this study’s criteria for success. These 2 students were in Grades 9 and 10.
- Of students living with two parents, 45.7% met this study’s criteria for success followed by 40.0% of students living with a parent and an identified stepparent, 33.3% of students currently living “in care”, 32.1% of students living with a mother only, 30.8% of students living with a father only, and 30.8% of students living with grandparents. No students who lived in alternate care or with another relative met the study’s criteria for success.
- Of the 9 students who had once lived “in care” but who were no longer in these placements, only 1 student met this study’s criteria for success.
- Of students who had experienced 4 or more home placements, only 1 out of 11 students met this study’s criteria for success.
- Of students in Grades 8-12 in the Sunnyville School District who had either successfully passed each of their four core courses by June 30, 2008 or who had successfully graduated from high school with a BC “Dogwood” Certificate of Graduation by that date, some factors applying to 10 or more students were most associated with this success. The diagnoses, behaviours and level of identification most associated with this success by percentage of students identified with these factors were:
  - having a Tourette’s disorder diagnosis(58.8%);
  - having cutting behaviours (45.5%);
  - having bullying/harassing others behaviours (41.7%);
  - having an anxiety disorder diagnosis (38.5%);
  - having both an attention deficit disorder and an anxiety disorder (37.5%);
  - having a learning disabilities diagnosis (36.4%);
  - having an oppositional defiant disorder (35.7%); and
  - having a separation anxiety disorder (35.7%).
- The support systems most associated with success by percentage of students identified with these factors who met the study’s criteria for success were:
  - having received support from a psychologist (out of school) (52.2%);
o having received support from a speech and language therapist in school (48.0%);
o having received support from a counsellor (out of school) (46.7%);
o living with two parents (45.7%);
o having received support from BC Children’s Hospital (44.8%);
o having received support from a paediatrician (42.2%); and
o living with a parent and an identified stepparent (40.0%).

5.4.3 Question Three

The third question addressed in this study was:

How does the case study evidence from the selected school district compare with literature about children and youth identified with “Behavioural Needs or Mental Illness” in populations and schools from elsewhere?

Some case study evidence from the Sunnyville School District was consistent with the literature about students with E/BD from elsewhere. The Sunnyville School District identified percentages of students in the moderate and intensive/serious E/BD categories consistent with those identified overall in BC. For the students identified with E/BD in the Sunnyville School District whose files contained cognitive scores, their mean overall cognitive level fell in the average to low average range, consistent with description in the literature; however, the overall mean of 91.6 for students in the Sunnyville School District was higher than some sample means for students with E/BD from elsewhere. As well, the prevalence of anxiety disorders within the Sunnyville School District students identified with E/BD somewhat supported the finding by Schoenfeld and Jenny (2008) that schools identified students with anxiety at a rate consistent with that in the general population, in that these authors gave rates from 6.5% to 21% for prevalence of an anxiety disorder and the Sunnyville School District identified 19.0% of students in the E/BD categories with diagnosed or described anxiety disorders. This information is confounded, however, as this study collected diagnoses, partial diagnoses and descriptors from a student’s entire life to attain the percentage. Thus, if only the percentage of students who currently met criteria for an anxiety disorder was included, this percentage would be lower. Also consistent with the literature was that the highest percentage of students identified with E/BD was at the Grade 9 level.

Most case study evidence from the Sunnyville School District differed from the few research findings located on school E/BD populations or it filled gaps as identified in the literature where no information was located. In understanding differences, it is important to recognize that most research about children and youth identified with E/BD emanated from the U.S., where the school special education category for students identified with emotional disturbance identified students differently than in BC.
This difference included the “maladjusted” opt out in the U.S. as the U.S. Department of Education specified that students who were classified as socially maladjusted were to be excluded from identification as students with emotional disturbance unless it was determined that they also had a diagnosed emotional disturbance (website).

- In the U.S., the rates of identification varied from state to state. According to the 2006 IDEA identification statistics, state identification rates reported for students aged 6-21 ranged from 0.24% in Mississippi to 1.59% in Vermont (U.S. Department of Education, website). These rates were lower than the rate of identification of 2.44% for the 2007-08 school year in BC. Research from the U.S. Special Education Elementary Longitudinal Study, and the National Longitudinal Transition Study-2 reported that 80% of students serviced by school system special education programs at the elementary level, and 76% of students serviced in secondary school were male (Wagner et al., 2005). Research from the Sunnyville School District found that 81.3% of students in Kindergarten to Grade 7 were male, a percentage consistent with the U.S. sample but in the Sunnyville School District, in Grades 8-12, 58.3% of students identified the moderate category, 55.6% of students identified in the intensive/serious category and 56.3% overall were male. As well, in the Sunnyville School District, there were actually more females than males identified in the moderate category and overall in Grade 10.

- The research literature established that students with E/BD frequently have learning difficulties and learning disabilities (Cantwell & Baker, 1991; Fessler et al., 1991; Glassberg et al., 1999; Goldstein et al., 1985; Kauffman et al., 1987; Prior et al., 1999). As well, 38-75% of students identified with E/BD in the U.S. were also recognized to have learning disabilities. In the Sunnyville School District, although some students with primary learning disabilities identification may have had a secondary E/BD identification, only 5.2% of the students with primary identification as students with E/BD in Kindergarten to Grade 7 and 10.5% of students with primary identification as students with E/BD in Grades 8-12 were also identified as students with learning disabilities.

- U.S. based research from G. J. Benner, Nelson, and Epstein (2002) described 71% of children with E/BD as having language deficits in the areas of expressive, receptive, and pragmatic language and that in public school samples of students with E/BD, rates of expressive language deficits were 88%; receptive language deficits were 68%, and pragmatic language deficits were 86%. As well, the American Psychiatric Association (2000) stated that expressive language disorders were a risk factor and comorbid with externalizing emotional disturbance. Nelson, Benner, and Cheney (2005) found that in samples of Kindergarten to Grade 12 students, 68% met criteria for a language deficit, particularly in the expressive area. Research by Bain (2000) also reported that individuals with attention deficit disorder had difficulty in expressive language activities related to social competency and other behaviours. Although most students with E/BD were described to have language based issues, in the Sunnyville School District, speech and language services had been received by 53(13.8%) of the students identified with E/BD. This suggested either a lower service level than identified needs or a
significant difference between the identified needs in the U.S. samples in comparison to the Sunnyville E/BD population.

- The expected prevalence of Tourette’s disorder that caused significant symptoms and significant impairment was expected to be 0.1% of the population of children and youth (Wadell & Shepherd, 2002) yet there were 20 students (1.3% of the students in the entire district) formally identified with Tourette’s disorder in the Sunnyville School District E/BD population.

- Research by Biederman et al. (1991) suggested that in a U.S. sample, ADHD and conduct disorders were comorbid for at least 30-50% of the population, whereas, in the Sunnyville School District, attention disorders were comorbid with conduct disorder for only 4% of the population. The Biederman et al. study noted that ADHD and opposition disorders were comorbid for at least 35% of the population and, in the Sunnyville School District, 32% of students with attentional issues also had an opposition disorder, a percentage consistent with that presented in the Biederman study. In another study by Chavira et al. (2008), attention issues were comorbid with conduct/opposition behaviours for 35.7% of the population studied. Thus, in the Sunnyville School District, a lower percentage of students identified with E/BD than would be expected was identified with both an attention disorder and a conduct disorder but a consistent percentage was identified with comorbid attention and oppositional disorders.

- In the U.S., Wagner et al. (2006) stated that although 7 out of 10 students classified with E/BD attended integrated classes in their neighbourhood schools, elementary students with E/BD were less likely to attend neighbourhood schools. In contrast, in the Sunnyville School District, although 24% of all students identified with E/BD in high school alone attended alternate schools.

- A study by R.J. Sawyer and Dubowitz (1994) reported that of all school age students who lived “in care”, 41% had been grade retained at least once, 4% had repeated two or more grades; 34% of students ages 5-11 and 63% of students ages 12-19 had failed at least one grade. In Sunnyville School District, it was rare to retain students in elementary school (Kindergarten to Grade 7).

- In the U.S. based literature, students with E/BD experienced high rates of academic underachievement (Levy & Chard, 2001) as well as course and grade failure (Wagner & Blackorby, 1996). It appears that students identified with E/BD in the Sunnyville School District did not fail courses and grades in elementary school; instead, they frequently failed courses in Grades 8 and 9. Exact grades were not collected from students identified with E/BD in the Sunnyville School District. Eleven percent of the students identified in the intensive/serious category failed English 10, but in Grade 12, no students with E/BD failed either Communications 12 or English 12. In Mathematics, 14% of students identified in the moderate category did not pass Essentials of Mathematics 10. Science 10 was more problematic as 21% of students identified in the intensive/serious category and 17% of students identified in the moderate category did not pass. Thus, it appears that the nature of some courses was more difficult for students with E/BD in the Sunnyville School District but if students were to fail courses, this failure tended to
occur in Grades 8 and 9. Students in Grades 10-12 did not often fail courses; they more often failed to complete them.

- Trout, Nordness et al. (2003) stated that they expected that students identified earlier who received services may have had different patterns of academic functioning from those who were identified in later grades, either because of the support received earlier or because their behavioural issues were more severe and were identified earlier. In the Sunnyville School District, students who were identified in elementary school were actually more successful as 38.0% of students identified in elementary school were successful in comparison to the 32.3% of students who were identified in high school. Whereas it may be thought that later emerging behaviour difficulties may have less effect on learning, and that students who had experienced behaviour challenges for a longer period of time would be more affected by them, it may be that early intervention mediated for academic weaknesses and that the earlier intervention was effective.

- Although the literature suggested that some combinations of diagnoses were more problematic than others (Gresham et al., 2000) and that more students with comorbid disorders may drop out of school (Cullinan and Epstein, 2001), information from the Sunnyville School District suggested that students with comorbid attentional deficits and anxiety disorders were more likely to grade-to-grade transition successfully (37.5%) than average, whereas students with anxiety disorders and depression related disorders were less likely to graduate (31.6%).

5.5 Discussion of the Results

Students with E/BD are widely recognized for not doing well in school. In addition to their mental health concerns, they frequently experience learning difficulties; academic underachievement; poor academic skill levels; course and grade failure; high rates of school noncompletion; as well as poor postsecondary social, education and employment outcomes. They are difficult to engage, teach and maintain in school. Although the rates of disorder in children and youth depend on the stringency of the criteria used to define disorder; the age, gender and socioeconomic status of the subjects; the method and sources used to gather information; as well as the information available in the sources (Mash & Dozois, 2003), rates of disorder in children and youth, when similar comparisons are made, are similar elsewhere in the world. These rates of disorder in children and youth may be stable (Kaufman & Landrum, 2009) or are more likely increasing, as reported by the U.S. Public Health Service (Kern, 2008). When the U.S. Public Health Service stated that if the mental health problems of youth remained untreated, they would have serious economic and social implications for the future (Kern), and the Canadian Pediatric Society Status Report on Canadian Public Policy and Child and Youth Health (2007) warned that mental health problems threatened to become the next paediatric epidemic, it is evident that fields outside of education are highly concerned about the state of mental health in children and youth. Inside the field of education, some, such as Cook, Landrum, Tankersley, and Kauffman (2003), have labelled the lack of success of children and youth with E/BD as a crisis in education.
Thus, the importance of addressing the E/BD and the learning difficulties of students with E/BD is clear. Addressing the E/BD and learning difficulties of students identified with E/BD must be a priority for school systems.

The field of education has responded to the emotional and/or behavioural concerns of children and youth as have others in many fields including medicine, psychology, social work, sociology, and criminology. However, as students identified with E/BD also experience learning difficulties; academic underachievement; poor academic skill levels; course and grade failure; as well as poor rates of successful school completion, the field of education must respond as well. Yet, when the Director of Special Education in the school district in which I was a school psychologist had called me into her office and had asked me why students in our district who were identified with E/BD were not completing high school and what we could do to improve their high school graduation rate, answers were not easily given, as there was little to be referenced about the learning of students with E/BD in BC. In addition, the literature from elsewhere was frequently about community or clinical populations or about groups of individuals with particular disorders or challenges, but not about school populations of students with E/BD or about the learning of students identified with E/BD, or about students with E/BD who were taught in integrated classrooms and certainly not about students defined in the same way as in BC. In fact, the literature from elsewhere was often generated by researchers who were not even in the field of education, and who did not focus on how students with E/BD were being engaged, taught, and maintained in integrated classrooms in regular schools. Thus, when the Director of Special Education in our school district asked me these two questions that ought to be of importance to all educators, there was no clear response to give.

The lack of evidence based research that addressed the learning and school success of students with E/BD has happened, in part, because the researchers who have dominated the study of children and youth with E/BD have been located in fields outside of education, and they have been interested in other areas, including the control and elimination of problem behaviours. As well, the research that could have been of use to educators often did not reach them, due to a described lack of collaboration between those who did clinical research and those who were involved in researching and practicing implementation strategies. The concentration on the control and elimination of problem behaviours in children and youth with E/BD by educators has also been blamed for the lack of research on the learning of this population, although it is recognized that the behaviour of students with E/BD does have to be controlled so that these students can be maintained in classes and schools and so that these students can learn. It is important, however, that the behaviours of students with E/BD are not the sole focus of the interventions provided for them. As behaviour and learning are entwined, both need to be addressed. Educators also cannot blame the research because so much of it comes from outside the field of education, as children and youth with E/BD have complex needs that are best understood by the collaborative understanding of many fields. That the field of education has somewhat neglected the academic learning of this population is not excusable, however, and needs to be
rectified. Educational research needs to sit at the collaborative table to take its distinct role and to provide its expertise.

The role educators take in researching the learning of children and youth with E/BD needs to be as well established as that for children and youth with learning disabilities. The identity of students identified with E/BD in the school system needs to be established and factors associated with success for these students needs to be established. The research needs to be specific to subpopulations of students with E/BD; and it must be developmentally and etiologically based. It needs to have well defined subjects, and it needs to describe their gender, age, grade, spoken language, cognitive ability, socioeconomic status, geographic location, as well as their specific disorders, the severity of their disorders, and their comorbidity. It also needs to understand the implications of subjects’ age, gender, grade, educational placement, and educational history. It needs to be completed with a variety of different tools for analysis including direct observation in a variety of subject areas. Intervention research must occur for long enough duration to determine its long term effectiveness and it needs to be measured with a variety of tools not just with screening measures and rating instruments. The research must include the voices of the children and youth; their families; educators; and community supports. In the end, the research about children and youth with E/BD needs to be able to answer what works, for whom, under what conditions, and for how long.

In order to be consistent and to compare research, it would be useful for school systems, particularly in Canada, to have common labels, language, definitions, and descriptions. For example, currently the label “EBD” is used to identify children and youth with emotional and/or behavioural disorders elsewhere, but not in BC where the term “Behavioural Needs or Mental Illness” is used. Under this term, students who experience more internalizing mental health disorders are distinguished from those who experience more externalizing mental health disorders and externalizing disorders can be identified by means of a behavioural and/or mental health assessment whereas severe mental illness is to be identified by means of a diagnosis provided by a mental health professional. In BC, some behaviours listed are tied to causation (abuse and neglect). Whereas the category for E/BD in the U.S. excludes students who are classified as socially maladjusted, they are included in BC as students with “behaviours related to social problems such as delinquency, substance abuse, child abuse, or neglect” in the “Students Requiring Behaviour Support or Students with Mental Illness” category. Another difference between the BC and U.S. school systems is that in the U.S., students must have been exhibiting the characteristics of E/BD over a long period of time for identification to occur, but in BC, identification in the moderate category requires that the behaviours are evident over an extended period of time, in more than one setting and with more than one person. As well, identification in the intensive/severe category needs to show that support services required and received are beyond normal capacity and this capacity is shown by means of documentation of previous plans, interventions or severity (not by duration of behaviour). In contrast to the U.S. and some other provinces in Canada, in BC, classification criteria is used to separate students who need behaviour support or who need support because of a
mental illness from students who require intensive interventions because of their behaviours or who have a serious mental illness. This implies a severity difference in categorization but the categorization also uses service provision and a suggested rate of identification to separate severity levels. A further difference in BC is the classification of students who can be identified as having Complex Developmental Behavioural Conditions in the “Physical Disabilities or Chronic Health Impairments” category. Thus, this lack of consistency makes understanding E/BD in school systems more difficult, and the research about students identified with E/BD less comparable.

In BC, definitions and descriptions of the two suggested intervention systems, “integrated case management” and “wrap-around” are not provided by the Ministry of Education. Although integrated case management is practiced by other ministries, such as the Ministry of Child and Family Development and by community agencies, it is understood and practiced differently in different locales. When integrated case management models are utilized in education, it is not clear whether they are to replicate the individual education format or the format used by other ministries and agencies that often need to address goals in response to mandated risk assessments. The use of the term “wrap-around” by the Ministry of Education is also curious, as it could be an adaptation of the U.S. based wraparound system of care approach with some exclusions such as the requisite for flexible, non-categorized funding; however, this is not known as no definition or description is provided by the Ministry of Education.

The research describing the individual characteristics of children and youth with E/BD gives evidence that many children and youth experienced one or more mental health and/or behaviour problems that caused them distress and impairment over the course of their lives. For some children and youth, their problems were experienced throughout their lives; for others, the problems came, went, and returned variously; and for still others, their problems were characteristic of a period in their lives. The severity of the problems experienced by children and youth ranged from mild to severe. Service provision was attained for few of these students and certainly not for all the students who needed the service. The most common place service was received was at school. Concern was expressed in almost all of the research reviewed that the E/BD problems in children and youth were of pressing concern, that more support was needed for more children and youth, and that it was required earlier in their lives, when their E/BD concerns emerged rather than after their functioning had been significantly affected for an extended period of time. As service was predominantly received at school, it would be important for school systems to acknowledge a dominant role in identification of E/BD and intervention for E/BD. To facilitate this role, school systems need to ensure system wide training is provided to educators to be aware of E/BD signs and symptoms so that they can provide supportive systems and be able to refer students on for further service and intervention as required.

Some research about the parenting of children and youth was relevant to the academic achievement of students with E/BD. This research was concentrated in the following areas:

- family composition including the effects of family composition, the effects of disrupted families through parental divorce, death or remarriage; as well as the
placement of children and youth “in care” or with relatives including grandparents;

- the difficulties in parenting a child or youth with E/BD;
- the problems of caregivers and how these problems affected children and youth, including the caregiver problems common to parents of children and youth with E/BD;
- the effect of socioeconomic status on E/BD;
- the role parents had in the education of their children including their relationship with schools; and
- the role of parents on the collaborative teams that supported children and youth with E/BD both in school and in the community.

Some themes ran through the parenting literature. It was clear that when parents, themselves, had issues such as mental health disorders (including maternal depression); or had problematic parenting practices (including practices that were abusive, critical, inconsistent, violent, harsh, cold, or neglectful); or had experienced disrupted family structure; or they lived in poverty, then the children and youth in these homes had more problems including more E/BD and more learning problems. Sometimes children and youth were removed from homes and were put “in care”. In addition to the effects of parents’ attributes and actions on children and youth, the literature also focused on the difficulties the parents of these children and youth with E/BD had in caring for them. These parents frequently suffered from “caregiver burden” which exhausted them both emotionally and physically. Although more exhausted parents attained more services for their children, the greater number of services also contributed to the burden.

Much literature was devoted to determining correlates between parents’ actions and the better achievement of their children, including those with E/BD. In general, parents with more gave more, and, as a result, their children did better in school. The implication was that if parents whose children were not doing as well in school were in better circumstances and they contributed more, then their children would achieve as well as the high achieving students. This suggests that a “Matthew effect” may be at play in the academic success of students, following the biblical wisdom, “For unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath.” (Matthew 25:29). In evidence, families with two more educated parents who did not have mental health or learning challenges and did not have numerous listed difficulties tended to have children and youth who did not have a genetic predisposition towards a mental health disorder, did not face the environmental circumstances described as hindering their education, and did not have learning challenges. These children and youth more often involved their parents in their education, their parents contributed the time and energy to their children’s education, and their parents participated optimally at school. As a result, schools also responded better to these students, giving them more time and attention, expecting more of them, and these students achieved better. Schools also responded better and more often to these more educated, more involved parents. Conversely, the literature suggested that many children and youth with E/BD lived in single parent homes or “in care”; had a
genetic predisposition towards a mental health disorder; lived in poverty; had experienced problematic parenting practices; and had learning difficulties or disabilities. Their parents, who were often less educated, typically experienced the caregiver burden associated with caring for children and youth with E/BD, but they did not have the resources of higher socioeconomic status families and may not have been as able to be as involved in their children’s education, and, if they became involved at school, the system may not have responded as well to them because of them coming from lower socioeconomic status backgrounds with different ways of understanding, different beliefs, and different actions; as well as stigma from the school system; and parental blame for having a child or youth with E/BD. If perceptions were maintained by the child or youth, their parents, or the school that the child or youth could not do well in school, then these perceptions were found to influence the actions taken by each which further depressed the child or youth’s achievement.

Implied or stated in the literature was that “more” was required of parents for their children to do better. Parents needed to:

- be more involved when their child was young;
- be more supportive of education;
- be more involved in learning activities;
- be more involved in education at home;
- be more involved at school;
- be more involved in school activities;
- be more involved in volunteering at school;
- be more interested in their child’s school work;
- maintain more monitoring of school work particularly when their child was young;
- give more encouragement and give encouragement more consistently;
- be more knowledgeable about their child’s school performance;
- interact more with their child’s teachers;
- have higher expectations of their children;
- give more affective support and acceptance to their child;
- attend more sports events, plays, and concerts;
- have more positive relations with schools;
- give more input to teachers; and
- when possible, take a vital role on the community-school teams that supported their child or youth.

Overlaying the entire parent related literature was the importance of better socioeconomic status, the benefit of greater parental education levels, and the problems associated with poverty including time restraints; job restraints; as well as the effects of living in a poor neighbourhood with fewer resources and more negative influences. The irony of asking parents of children and youth with E/BD to do more and to be more involved is that they were already described to be burdened from the parenting role they already had difficulty fulfilling. An additional problem with the “more” intervention is that it described differences between the parenting of high achieving students and low achieving students, and, for the most, this kind of research was not designed to
prescribe or describe interventions for students with E/BD so how the “more” interventions were to be implemented and happen was not described, and whether they were effective as interventions was also not described.

The literature describing the community-school-family support for children and youth with E/BD found that children and youth supported by comprehensive teams did better, and that the teams that supported the child or youth benefited as well. The literature also concentrated on the philosophy of working together, the models to be used, the processes to be followed when working together, and the roles participants were to maintain on the collaborative teams. Emphasized throughout was that the system of care intervention models, wraparound and integrated case management, were strength based and family driven/empowered. The literature reported that intervention with system of care models resulted in better behaviour and academic outcomes; however, the literature also reported that this support may be long, involved, and intense to effect change in youth. The system of care intervention model was developed to decrease fragmentation and to reduce the existing institutionalized method of service delivery and out of community care. Thus, if “wraparound” and “integrated case management” are used to describe intake or discharge meetings at institutions distant from the community in which the child or youth lived or to describe sporadic meetings between individuals from one ministry or agency and another, or if “teams” name a sequence of different professionals from different institutions who constantly change, or the family is the recipient of information rather than being empowered or driving the teams, then the system of care intervention model is actually becoming a vehicle to deliver fragmented service, the very difficulty the model was designed to avert.

The literature on the learning of students with E/BD presented E/BD and learning as entwined, and some research attempted to discern which strand, E/BD or learning, emerged first or if other causal factors such as attentional difficulties underlay both. The interventions suggested for students with E/BD reflected the entwined nature of E/BD and learning, as some interventions addressed learning through behaviour strategies; some addressed behaviour through learning strategies, while others addressed E/BD through behaviour strategies, and still others addressed learning through learning strategies. The strategies described for students with E/BD were sometimes borrowed from other fields and may not have been researched as effective for students with E/BD. For example, strategies to address speech and language issues were borrowed from that field. Other strategies were borrowed from what could best be described as common good practice (e.g., use fair discipline; give students choice). What was not always clear was the effectiveness of the strategies provided, and if they were found to be effective, how effective they were, and for whom they were effective.

The literature commonly reported that students identified with E/BD did not do well in school. Although the literature reported that the overall intelligence scores of students with E/BD fell in the average range, the overall means were lower than in the general population. The research also reported that students with E/BD had specific cognitive weaknesses including attentional problems; speech and language weaknesses; as well as weaknesses in reading, spelling, mathematics and writing. In short, students identified with E/BD had deficits that made achieving well in school
difficult for them. In addition to their learning deficits, they experienced unhelpful ways of coping with these deficits because of their E/BD, which, in turn, exacerbated their difficulties. As students with E/BD progressed through elementary school into high school, not doing well emotionally/behaviourally and academically at school made the higher demands of high school particularly challenging for them, and they, in turn, became more challenging for teachers and others in the school system to maintain in class and teach. For many students with E/BD, the cumulative effect of both having difficulties and being difficult for others was that they left school by choice or by request. Unfortunately, for most, they traded a troublesome life in school for an equally troubled life beyond school. Although the literature chronicled their trajectories of underachievement and the lack of success they had in the school system, there was little intervention research that addressed the comprehensive nature of the difficulties they experienced. Thus, although the literature confirmed the entwined nature of behaviour and learning, the interventions researched or suggested for them tended to address their difficulties in ways that did not reflect the interrelated nature of their difficulties. As well, the interventions recommended in research studies or in recommendation lists were sometimes limited in approach, perhaps reflecting underlying assumptions of the nature of the students’ difficulties. For instance, if a suggested approach addressed learning only by improving attendance at school, then the underlying assumption that students who attended school learned more, while a truism for most, does not acknowledge many other issues. Students with E/BD have genetic, environmental, and individual causal factors where the solution needs to include diagnosis and more specific interventions being implemented in the child or youth’s environment. By treating the E/BD as having behaviour that the individual needs to extinguish limits an examination of other teaching and learning factors which may be maintaining the behaviour as well as other genetic and environmental factors that may be contributing to the maintenance of the behaviour.

This study provides a start to filling the research void on the learning of children and youth identified with E/BD in BC so that school systems can better address the difficulties these students have in progressing successfully through school. In this study, I have provided an understanding of the students in a particular school district who were identified with E/BD on a specific date. I have described the students by identification category; grade or grade grouping; gender; cumulative diagnoses; behaviour descriptors; grade and length of identification; changes in identification; living arrangements; educational placement; support services received; cognitive ability and geographic location. For students identified with E/BD in high school (Grades 8-12), I have identified factors associated with their successful completion of their four core subjects or in graduation from high school. From the literature, I have also identified the nature of the challenges that students with these characteristics were described to have in achieving academic success; and, the interventions that were suggested for improving the academic success of students with these characteristics.

The information provided in this study is based on a thorough literature review and information about the students identified with E/BD in one school district in BC, Canada on May 30, 2008 from district held information. The literature reviewed was
then placed together with the information generated from the individual students’ file reviews, much as a quilt maker takes odds and ends of fabric and fits them together to make a quilt. On close examination, there were so many differences in the literature and among the students identified with E/BD that it appeared as if each student or population had to be worked with individually. This is true, just as each piece of fabric is worked with individually for the metaphorical quilt. But, just as the quilt maker stands back to examine the overall pattern and design, so too, the researcher needs to step back and tell about the whole, as it was put together this time, in this way, in order to provide a cohesive response. Thus, in understanding the whole, it is important that the individual needs and required interventions for individuals still need to be recognized but it also needs to be recognized that the overall pattern presents a different perspective that also important to recognize. This latter perspective is described here.

In the selected school district, for the 2007-08 school year, approximately 2-3% of the district’s students were identified with E/BD. The percentage of students who were reported to Ministry had increased by 17% over the previous 5 years. Reasons for this increase could reflect: changes in identification policy; increased need; students identified with E/BD staying in school instead of dropping out of school; greater diligence in identifying students; decreased diligence in removing students from identification; and/or the identification of students with less severe needs. All students with E/BD in the elementary schools (Kindergarten to Grade 7) were taught in their neighbourhood schools and successfully grade-to-grade transitioned through to Grade 8. In high school (Grade 8-12), the majority of students identified with E/BD attended regular high schools. Some 24.0% of students identified with E/BD in high school attended the district’s 2 alternate schools. By Grade 12, only 30% of the students identified with E/BD in BC had graduated with the BC “Dogwood” Certificate of Graduation and 29% of students in the Sunnyville School District had attained this certification. Thus, most students who were identified with E/BD BC and in the Sunnyville School District were not successful in completing school with a BC “Dogwood” Certificate of Graduation.

This, in itself describes a system different from that in the U.S. where identification rates for students with E/BD varied from state to state but the rates were generally lower than in BC. In the U.S., it was less likely for elementary school students identified with E/BD to attend their neighbourhood schools than it was for high school students. This is different from the Sunnyville School District, where all elementary school students attended integrated schools but 24% of high school students with E/BD attended alternate schools. Whereas, in the Sunnyville School District, only 29% of students who had been identified with E/BD at some time between Grade 8 and 12 had graduated with the BC “Dogwood” Certificate of Graduation, in the U.S., in a 2004 report, Nelson et al. stated that 42% of students with E/BD had graduated with a high school diploma and Vander-Stoep et al. (2003) stated that 48% of students with E/BD in one U.S. study had dropped out of school. Thus, whereas 42% and 48% of students in the U.S. studies had graduated from high school, only 29% of students identified with “Behavioural Needs or Mental Illness” had graduated with the BC “Dogwood” Certificate of Graduation in the Sunnyville School District in the 2007-08 school year. Thus, in comparison to students identified with E/BD in the U.S., students identified with E/BD in
the Sunnyville School District differed from those described in research by definition, percentage of the population identified, by placement options in elementary school, and by their high school graduation success rate.

Whereas some identification categories for students with special needs commonly maintain students within the categories once identified, such as that for students with learning disabilities, which recognizes that learning disabilities are lifelong, the identification categories for students with E/BD identified students during their difficult times and differentiated them by the severity of their difficulties and the level of service they required in order to be successful in school. Thus, students with E/BD were identified in the relevant identification categories during each and every year of school and throughout each school year, but they were also removed from the categories, usually within a year or two of being identified in the categories, because they no longer needed to be identified, as their mental health and behaviour had improved or for other reasons. For the 2007-08 school year, during the 8 months from September 30 to May 30, of the 384 students identified with E/BD on May 30, 12% had been added to the categories, 7% had been removed from the categories, and 2% had transferred from one category to the other. Of the newly added students, 3.6% had transferred into the district from other districts during the 8 months. Fluidity had also occurred over time between the two E/BD categories as 19.5% of the students from Kindergarten to Grade 12 had changed from one E/BD category to the other, although it was more common to be moved from being identified in the moderate category to being identified in the intensive/serious category. While the fluidity in and out of the categories was evident in students from Kindergarten to Grade 10, no Grade 11 or 12 students were newly added to either the moderate or intensive/serious E/BD categories over the 8 months between the Ministry of Education count on September 30, 2007 and May 30, 2008. Students identified in elementary school who were still identified with E/BD in high school were more successful in passing their four core subjects than were students who were first identified in high school (38.0% vs. 32.3%). Nowhere was the percentage of students identified with E/BD over the course of their Kindergarten to Grade 12 education indicated but this percentage would far exceed the total percentage of students identified in any other category of special needs based on the fluidity in and out of the category noted during the 8 months from the Ministry of Education count to the date used to identify students for this study. As a result of the described differences for students in the E/BD category, they need to be understood and managed differently from other categories of students being identified with special needs in ways that reflect the fluid nature of the category in capturing students identified with E/BD.

This study found that there were students identified with E/BD in the Sunnyville School District in each and every grade from Kindergarten to Grade 12. Some few students were identified when they entered Kindergarten. Overall, there were more students who were identified with E/BD in each grade from Grade 8 to 11 than in any grade in elementary school. Whereas the number of students identified with E/BD in the moderate category was higher from Grade 7 on, this pattern was different in the intensive/severe category where there were significantly more students identified with E/BD by number and percentage in Grades 9 and 10 followed by a decline in the
number of students identified in Grades 11 and 12. In Grade 12, the percentage of students who were identified with E/BD in the intensive/serious category was almost as low as the percentage of students identified in this category in Kindergarten. Not unexpectedly, students identified in the moderate category were more successful than students identified in the intensive/serious category (40.7% vs. 30.6%).

There were some differences by gender found in this study. Whereas in Kindergarten to Grade 3, males were identified with E/BD at a rate 4.6 times that of females, in Grades 4-7 males were identified with E/BD at a rate 4.4 times that of females, and in Grades 7-12, males were identified at a rate 1.3 times greater than of females. In Grade 10, there were more females than males identified in the moderate category and overall. Whereas the number of males identified peaked in Grades 7 and 9 then declined after Grade 9, the number of females identified increased from Grades 8-10 followed by a decline. Overall, males were more often identified from Kindergarten to Grade 12, whereas females were predominantly identified in high school from Grades 8-12. In Grades 8-12, 37.2% of males were successful in completing their four core subjects or in graduating with a BC “Dogwood” Certificate of Graduation by June 30, 2008 whereas 33.0% of females were successful in meeting these criteria. Of students who were in Grade 12, 8(24.2%) students graduated with a BC “Dogwood” Certificate of Graduation by June 30, 2008; 4 were male and 4 were female; 15 males and 10 females did not meet these criteria. Reasons that more males than females did not meet these criteria are unknown, but it may be that males who were more often identified in earlier grades had already dropped out of school, and were therefore less reflected in the secondary school findings.

Cognitive scores were available for some students identified with E/BD in the selected school district. The mean cognitive ability of these students fell at 91.6, a score lower than the mean of 100 reported in the general population. It is not possible to state whether this reflects who was assessed or whether this information aligns with the commonly referenced information that students with E/BD have average to low average intelligence levels and that lower intelligence predicts delinquency.

In order of frequency, students with E/BD lived in families headed by two parents (including stepparents) (40.9%), a mother only (29.2%), “in care” (14.1%) with a father only (5.7%), or with a grandparent or grandparents (6.5%). There were differences between students identified in the moderate category and students identified in the intensive/serious category. Whereas 50% of students identified in the moderate category lived with two parents and 6.8% lived “in care” not with relatives, 32.3% of students in the intensive/serious category lived with two parents and 21.4% lived “in care” not with relatives. Eleven of the students identified with E/BD had lived in 4 or more home placements. One student had experienced 7 placements “in care” between birth and age 5 and another had experienced “at least 14 placements”. Rates of success for students for students in Grades 8-12 using this study’s criteria were as follows: two parents-45.7%; a parent and an identified stepparent-40.0%; “in care”-33.3%; a mother only-32.1%; a father only-30.8%; with grandparent(s)-30.8%. Of the 9 students who had once lived in care but who were no longer living “in care”, only 1 had successfully passed his/her four core courses by June 30. Of the 11 students who had
experienced 4 or more home placements, only 1(9.1%) met the study’s criteria for success. The home situations for students with E/BD were different from the 68% of students in Grades 7-12 overall in BC reported in The McCreary Centre Society (2003) survey to live with two parents as well as the 84.1% of all children in Canada who were reported in the 2006 Canadian census to live with married or common-law couples. The implications of living in fewer two parent homes, such as possible time and financial constraints and having experienced possible family disruption needs to be considered when working with families of children and youth with E/BD. Although this study did not show the relationship between poverty and school success, it is suggested that the impact of family poverty, family structure and some of the other family influences described in the literature needs be explored further.

Some students with E/BD had changed schools numerous times. When the file reviews were completed for this study, reasons for school changes were noticed but were not documented. Reasons included: family disruption (separation, divorce, death, new combinations of caregivers); parent characteristics (e.g., ADHD, impulsivity, losing jobs); marginal employment of parents necessitating moves for work; poverty related issues including moving to available affordable housing; as well as child/youth related issues including moves to placements “in care” or switching schools for programs or leaving schools where the family was unhappy. Of students in grades 8-12, 26 students had attended 5 or more schools. It was noted that one student in Grade 5 had changed schools 11 times. Of students identified with E/BD in Grades 8-12 who had attended 5 or more schools, 2(8%) were successful in passing their four core subjects successfully. These students were in grades 9 and 10. The effect of changing schools needs to be examined further for its relationship to both these students’ emotional/behavioural adjustment and their learning needs as its impact appears to be significant.

Alternate identification was maintained by some students. Learning disabilities designation was maintained by 4.2% of students in the moderate category, a rate not much higher than the approximate 3% of students identified with learning disabilities overall in the Sunnyville School District. A far different percentage occurred in the intensive/serious category where 16.1% of the students were identified with secondary learning disabilities. Of the 33 students with the additional learning disabilities designations in Grades 8-12, 10(30.3%) met this study’s criteria for success. This rate is compared to the U.S. research studies that suggested that half or more of students with E/BD could be identified with learning disabilities. Students were identified with learning disabilities prior, concurrently, and subsequent to being identified with E/BD, however it was more common to be identified with learning disabilities before being identified with E/BD. Of the 4 students in Grades 8-12 who were identified as gifted, 2 met the study’s criteria for success. Because of the overlap between learning issues and E/BD, it is recognized that students identified with E/BD may need interventions for specific learning differences.

Speech and language services had been received by 13.8% of the students with E/BD and by 10.2% of those in high school. Of the 25 students who had received speech and language services, 12(48%) met the study’s criteria for success. This is significant as numerous studies noted the overlap between E/BD and speech/language
deficits. For instance, G.J. Benner et al. found that public school samples of students with E/BD had rates of expressive language deficits of 88%, receptive language deficits of 68% and pragmatic language deficits of 86%. Thus, it may be that only students with the most significant speech and language deficits in the Sunnyville School District had received services for these deficits and yet this population presented with a higher rate of success than Sunnyville students identified with E/BD overall. Of the 2 students who had received services from the occupational therapist, both were successful, and of the 6 students who had received school district art therapy, 3 were successful.

The most common diagnoses held by students with E/BD overall were attention deficit disorder (29.9%), anxiety disorder (19.0%), oppositional defiant disorder (13.8%), and depression (10.7%). The most commonly described behaviours by the students identified with E/BD were: verbal aggression (swearing, threatening, yelling, arguing); physical aggression/physically showing anger; truancy; non compliance/rule breaking/disobedience/defiance; and, fighting/assault. At some time in their lives, 27.3% of the students identified with E/BD had been supported by a Ministry of Children and Family Development social worker, 26.8% had been supported by a Child and Youth mental health worker, and 26.0% had received services at BC Children’s Hospital. For service providers that had served 10 or more students in Grades 8-12, the higher than average rates of success were associated with seeing a non school psychologist (52.2%); receiving private counselling (46.7%); involvement with the BC Children’s Hospital (44.8%); and seeing a paediatrician (42.2%). For diagnoses described for 10 or more students in Grades 8-12, the above average rates of success using the criteria set in this study were exhibited by those with: Tourette’s disorder (58.8%), anxiety disorder (38.5%), attention deficit disorder (36.9%), oppositional defiant disorder (35.7%), separation anxiety disorder (35.7%), and learning disabilities (medically diagnosed) (36.4%). For behaviours described for 10 or more students in Grades 8-12 identified with E/BD, the above average rates of success using the criteria set in this study were exhibited by those who cut self (45.5%), and those who bullied or harassed others (41.7%). Students with comorbid attention deficit disorder and anxiety disorders were more successful than the average rate of success for students identified with E/BD in Grades 8-12, whereas students with comorbid anxiety disorders and depression related disorders were less successful. Although this information describes the nature of students who had difficulties and those who, despite difficulties, were more successful than others with E/BD, it would be important to also examine the way in which teachers teach students identified with E/BD and how they can and do incorporate strategies for teaching that work better for students with specific needs. For instance, teaching teachers specific strategies to work with students with attentional or anxious or oppositional behaviours or for students who were verbally and physically aggressive would be useful. It would also be important to further develop working partnerships with the services that supported students identified with E/BD including social workers, mental health therapists, and BC Children’s Hospital to collaborate to provide consistent interventions across environments.

In high school, approximately three quarters of the students identified with E/BD attended regular high schools; the other one quarter attended the district’s 2 alternate
schools. No students in the alternate schools had successfully completed their four core subjects or had graduated with a “Dogwood” certification by June 30, 2008. This information needs to be interpreted with caution as the alternate schools did not program students in the same way as regular schools and the alternate schools admitted students who were deemed unlikely to succeed in regular schools. Five students identified with E/BD in Kindergarten to Grade 12 attended French Immersion programs and the 1 student in high school who was enrolled in a French Immersion program was unsuccessful in passing any course. Although noted, the issues underlying decisions to maintain students with E/BD in French Immersion programs were not explored in this study.

In the examination of grade-to-grade transition rates and successful completion of Grade 12 with a BC “Dogwood” Certificate of Graduation, it is important to recognize that the performance of students with E/BD on BC Government exams ranged from a 76% pass rate in Social Studies 11 for students identified in the moderate category to a 100% success rate in more than half of the government examinable courses taken by the students. It was therefore not the successful passing of these exams that was the issue in grade-to-grade transitioning but it was instead the successful completion of courses to enable students to move successfully on to the next grade level. Many students who grade-to-grade transitioned successfully in elementary school experienced course failure in Grade 8, as 39.5% of them failed at least one course. It is therefore likely that these students had already exhibited learning and skill deficits that materialized and/or were exacerbated in Grade 8. This pattern of course failure, combined with course noncompletion and leaving the school district continued on to Grade 12. In their final grade of high school, only 8(24.2%) of students who were registered in the school system on May 30 of their Grade 12 year as students with E/BD managed to receive the BC “Dogwood” Certificate of Graduation having completed all requisite courses by June 30. These successful students were each born in 1990, making it unlikely that any of them had been grade retained; 4 were male and 4 were female; 3 were also identified with learning disabilities; 6 were identified in the moderate category and 2 were identified in the intensive/severe category; 3 lived with both parents, 4 lived with a mother only and 1 lived “in care”. On May 30, 4 of the graduating students had been identified as students with E/BD for less than 2 years, 1 student had been identified for 3 years and 2 of the students had been identified in elementary school. (Information about date of identification was not located for 1 student). When the official rates of successful graduation were reported for this cohort, based on successful graduation with a BC “Dogwood” Certificate of Graduation within six years from the time they enrolled in Grade 8, the district reported that 29% of students who had been identified with behaviour disorders at some time during their five grades of high school had graduated with this certificate, a rate not altogether different from the 24.2% of Grade 12 students reported in this study who graduated successfully with this certificate based on their completion of all requirements by June 30, 2008. Why and how these 8 students were able to successfully complete Grade 12 with a BC “Dogwood” Certificate of Graduation is a further case study that needs to be researched.
In the end, to answer the main research question, some factors were most associated with the successful grade-to-grade transition and graduation of high school students identified with “Behavioural Needs or Mental Illness” in the suburban British Columbia school district in which this study took place. These factors, compared by the percentage of students with the factor who met the study’s criteria for success, for factors associated with 10 or more students identified with E/BD in Grades 8-12, are as follows: being supported by a psychologist out of school (52.2% successful); being supported by a speech and language therapist in school (48.0% successful); being supported by a counsellor out of school (46.7% successful); living with two parents (45.7% successful); being supported by BC Children’s Hospital (44.8% successful); being supported by a paediatrician (42.2% successful); being identified at the moderate behaviour/mental health level (40.7% successful); and, living with a parent and an identified stepparent (40.0% successful). As well, some diagnoses and behaviours were identified with higher rates of success for the students identified with E/BD in Grades 8-12. These factors, also compared by the percentage of students with the factor who met the study’s criteria for success, for factors associated with 10 or more students identified with E/BD in Grades 8-12, are as follows: having Tourette’s Disorder (58.8% successful); cutting self (45.5% successful); bullying and/or harassing others (41.7% successful); having an anxiety disorder (38.5% successful); having a comorbid attention deficit disorder and an anxiety disorder (37.5% successful); having an attention disorder (36.9% successful); having a learning disability, medically diagnosed (36.4% successful); having an oppositional defiant disorder (37.5% successful); and, having a separation anxiety disorder (35.7% successful).

5.5.1 Addressing Research Gaps and Weaknesses

Some previously identified research gaps and weaknesses have been addressed in this study. For the students identified with E/BD in the Sunnyville School District, the research included all students identified with E/BD in the category. It described and included the following information about the students:

- information about their cumulative diagnoses, concurrent diagnoses, and the kinds of problems they experienced;
- their cognitive ability when this information was available;
- their school placement;
- the prevalence of some concurrent disorders they had been identified with;
- full reporting of any additional special education identification, both current and historic;
- the lengths of time they had been designated by the school system as students with E/BD and the grades in which they were first identified;
- the school success of those in elementary school who maintained identification as compared to those identified with E/BD in high school; and
- wide based research with a large numbers of participants that differentiated results between males and females.
5.5.2 Further Gaps

Some gaps as identified in the research review were not addressed. These included:

- the voice of the school, parents, community, and students on the school success of students identified with E/BD in high school, information that could add a qualitative aspect to the study;
- descriptions of the challenges schools faced in teaching these students;
- a longitudinal study of the students identified in this study including chronicling their achievement in specific areas such as reading;
- qualitative information on the interventions used for the students in the study including observation of their learning in classrooms;
- separate study on the students with the most severe E/BD challenges;
- the socio-economic status of families with children with E/BD;
- evaluation by means of achievement measures other than screening instruments; and,
- how school practices were correlated to worsening or bettering of behaviour and/or academic success.

Some of these gaps have been addressed elsewhere by the researcher previously in three qualitative studies, one of which collected information from support teachers and administrators about school success for students with E/BD; another of which interviewed parents about their role on the teams that supported their children with E/BD; and a third of which interviewed youth about the integrated case management teams that supported them. Other gaps, such as the socio-economic status of the families with children with E/BD will be undertaken subsequent to this study. Still others will require different studies to be developed.

5.5.3 Further Research Questions

Further research suggested by this study includes:

- study of the 3.6% of students identified with E/BD who had transitioned into the Sunnyville School District over the 8 months between September 30 and May 30 from other districts in order to find out why they had transitioned and the success of their transition so that the district could determine process and procedures that may need to be put in place for midyear transitions.
- study of the 6.3% of the students who had been removed from the identification list between September 30 and May 30 to find out why they were removed and how well they were doing after their removal from the list. This study would help to put in place process and procedures for midyear transitions as well as assess for transition services for the students, their parents, schools, and community organizations that may be needed.
- study of the students who were identified with E/BD in elementary school who were no longer identified with E/BD in high school to find out how they had progressed through school after identification was removed.
• study that compared students identified with E/BD in elementary school who maintained identification in high school with those who were identified with E/BD in elementary school but had their E/BD identification removed in order to compare outcomes.
• study of Grade 9 students to find out why so many students in this grade were identified with E/BD and what interventions may be recommended.
• study to determine why the number of students identified with E/BD declined in Grades 10, 11, and 12 and whether this was the result of a bettering of behaviour and/or from students with E/BD dropping out of school.
• study of females newly identified in high school to determine their profiles and needs.
• study of the Sunnyville students identified with E/BD to determine whether there was a relationship between age of identification and academic skill levels such that students who were identified earlier were those who required greater academic support.
• study to determine if males, who were more likely than females to be identified in elementary school, were more represented in the population of students identified with E/BD with lower academic skill levels in high school and whether gender was the determining factor rather than length of identification or whether the current reported research from the U.S. reflected the settings in which students identified with E/BD in elementary school were taught.
• study of grade related issues to help schools put in place interventions that addressed common issues experienced at particular grade levels.
• study of the few students, mostly males, who were identified for longer periods of time. Determining how these students differed from those who were identified for shorter periods of time would provide insight as to why continued service was needed for some very few students and not for others. It would also provide insight as to whether a different type of service or additional services would be beneficial for students identified for longer periods of time.
• study of the students who dropped out of school compared to those who remained in school to determine learning and teaching factors that influenced the trajectories for both groups.
• study to determine the nature of the achievement difficulties that students with E/BD have and whether one of the significant differences between students identified in the moderate category and students identified in the intensive/serious category is one of academic/learning problems.
• study to determine the nature of the academic difficulties experienced by the students identified with E/BD.
• study to determine why students with E/BD attended the alternate schools in order to provide insight as to how inclusive neighbourhood secondary schools could better accommodate students with E/BD.
• study of students identified with E/BD who lived in the care of their grandparents to examine the specific challenges related to academic success that grandparents experienced in parenting these students. As these children and
youth were being raised by grandparents who may already have completed caregiving duties with the parents of these children and youth who were no longer able to care for them, it may also be that these families were dealing with their own parenting challenges as well as the issues of their own children and the issues of their grandchildren.

- study to find out how some students with E/BD had successfully completed the courses they had completed and why others had not been successful in completing courses.
- study of the trajectories of males compared to females for course success and graduation with a BC “Dogwood” Certificate of Graduation.
- study of students who received speech and language interventions to determine how receiving this service was related to successful course completion in high school.
- study of the mobile “at risk” population of students identified with E/BD to determine their specific needs and how systems could better support them.
- study of the students identified with E/BD who lived “in care” to determine the impact on school success of length of time “in care”, age when first placed “in care” and the impact of multiple home placements.
- study of the impact of community service providers on school success that considered the length of support, when the service was received, what kind of service was provided, and the effect of being supported by more than one service provider.
- study of the cognitive profiles of students identified with E/BD to determine if the verbal performance discrepancy described in the literature held in the BC context. If this held, it would suggest that some educational approaches would be more successful for this population than other approaches.
- study on how the public education system prepares and does not prepare students with E/BD for employment and or post secondary education and what preparation would be beneficial.
- study of the transition to high school of students identified with E/BD to find out specific needs of the E/BD population in the transition from elementary school to high school.
- study of the effects of family mobility on the school success of students identified with E/BD to determine how schools could better help these students who experienced frequent moves.
- study of reading interventions to find out which researched interventions were effective for students identified with E/BD.
- Study of teaching strategies that are effective across curriculum areas to determine which strategies were most effective with this populations

5.5.4 Key Recommendations Identified from the Study

Some key recommendations from the study are provided for consideration.
Establish and maintain transition procedures for students identified with E/BD:
  - entering and exiting programs for students identified with E/BD;
  - transferring between schools and districts;
  - entering school in Kindergarten; and
  - exiting school.

Provide the range of services needed for students identified with E/BD. In particular, recognize the importance of providing speech and language therapy to students who may benefit from this service.

Refer students identified with E/BD to outside services when needed. In particular, recognize the value of support from counsellors, psychologists, BC Children's Hospital, and paediatricians.

Understand that students identified with E/BD do better in two parent homes and that when they experience frequent caregiver changes, they have more difficulty achieving well in school. For this reason, strengthening families is recommended.

Understand that students who have attended high numbers of schools do not achieve as well in school. For this reason, encourage and support caregivers to maintain stable school environments for students identified with E/BD.

Know that the most common diagnoses for students identified with E/BD are attention deficit disorders, anxiety disorders and oppositional defiant disorders. In high school, depression is also common. Provide system wide and targeted interventions for students with these more common diagnoses.

Know that the most common described behaviours for students identified with E/BD are verbal aggression, physical aggression, noncompliance/rule breaking/disobedience/defiance, fighting/assault and poor socialization/isolation. Provide system wide and targeted interventions for students with these more common described behaviours.

Know that the most frequent out of school service providers for students identified with E/BD are the Ministry of Children and Family Development social workers and mental health therapists, followed by pediatricians and services by BC Children's Hospital. When undertaking collaborative endeavours, consider partnering with these service providers.

Support students identified with E/BD academically, recognizing that many of these students are not currently successful in completing their core courses in high school, from Grade 8 onward.

Understand that a higher percentage of students identified with E/BD in the intensive/serious category have identified learning disabilities than in the moderate category and in the general population and these students require additional support for their learning disabilities.

5.5.5 Further Recommendations

Some recommendations from the literature and the study are provided for consideration.
5.5.5.1 General Recommendations for School Systems Related to Philosophy and Awareness

- School systems value the attainment of good mental health and educational success for all students including students with E/BD. The valuing of mental health and success for students with E/BD is not separate but a part of a system wide approach.
- School systems are aware of the qualities or assets students need to attain to achieve the characteristics of mentally healthy children and youth.
- School systems are aware of the risk and resiliency/protective factors specific to E/BD so that they can help students develop mental health.
- School systems recognize that mental health in children and youth exists on a continuum from those who are mentally healthy to those who have E/BD that significantly impact them in all settings.
- School systems recognize that the mental health concerns of children and youth are considered by some to be at a critical or epidemic level.
- School systems recognize that mental health in children and youth is not static and that their mental health can vary over time and in different settings, but that some mental health disorders are more continuous than others.
- School systems recognize that they play a key and critical role in the development and maintenance of good mental health for all students. They recognize that schools are the primary social environment for most students and the only place that the development and maintenance of good mental health can be ensured for all students.
- School systems recognize that rates of mental health disorders vary by age and gender but, as students in Grades 8-10 have the highest rates of identification as students with E/BD by school systems, additional focus is placed on students in these grades.
- School systems recognize that rates of identification with comorbid disorders differ by age of the individuals and sample assessed but that most students identified with E/BD have more than one disorder.
- School systems recognize that most students identified with E/BD receive this identification for 1-2 years and that very few students are identified for 4 or more years.
- School systems recognize that once a student has met the diagnostic criteria for a disorder, the student is highly likely to meet the diagnostic criteria for that disorder again.
- School systems recognize the ongoing role they have in monitoring students once identified with E/BD for indications that they require intervention again.
- School systems value all kinds of families. They recognize that many parents/caregivers of children and youth with E/BD have life challenges themselves and school systems work with these families in a respectful, inclusive, collaborative way.
School systems recognize that the caregiving for children and youth with E/BD is often lifelong and more extensive than caregiving for children and youth without E/BD and that these children/youth do not necessarily respond well to discipline. School systems do not assume that recommendations that would be predicted to be successful for children and youth without E/BD would automatically be effective for children and youth with E/BD.

School systems recognize that the caregiving of a child or youth with E/BD can result in both objective burden (e.g., providing transportation, helping with daily tasks), and subjective burden (e.g., worry). This added strain can result in some parents/caregivers exhibiting emotions such as tiredness, sadness, and guilt that affect their levels of involvement in the lives of their children but when the mental health of their child or youth improves, this burden can diminish.

School systems recognize that students with E/BD are more likely to come from one parent homes than are students without E/BD and they consider possible implications of one parent homes such as time constraints and poverty. School systems maintain realistic expectations of these parents in regard to their involvement in interventions, homework help, attending meetings, and involvement at school.

School systems recognize that children and youth identified with E/BD from one-parent families are often living in poverty and may need more encouragement, more monitoring at school, more help with homework, more monitoring for absences from school, more intervention to address negative attitudes towards school, and more intervention to avoid or reduce disengagement from school.

School systems recognize that children and youth who experience caregiver disruption including parental separation, divorce, death, remarriage, and changing family compositions have more associated difficulties.

School systems recognize the value in collaborating with parents and caregivers as well as community supports identified by families to address identified child/youth and family issues in respectful solution focused ways, knowing that when family situations improve, the experiences of the child/youth also improve.

School systems recognize the benefits of working together with parents/caregivers as well as community service providers. These benefits include:

- better knowledge about the child or youth in different settings with more opportunity to implement interventions across contexts in consistent ways;
- improvement in coordination and access to services for students;
- reduction in duplication, gaps, and fragmentation in service;
- service use that is more efficient, and that occurs in more settings;
- reduction in numbers of policies;
- reduction of barriers between and amongst organizations;
- development of skill levels and capacity;
- more empowerment for all;
- increased knowledge about trends and changes;
o reallocation of resources where they are most needed which saves money and other resources.

- School systems recognize the philosophy and precepts of the system of care approach as well as the particular models recommended in BC, namely “wrap-around” and integrated case management.
- School systems recognize that students with E/BD are best supported in systems that provide them with: interventions that are systematic, data-based, prolonged, monitored, and have multi-component treatment in a progression of settings from safe to less safe that address academic, social and community services as well as intervention from community supports.

5.5.5.2 Recommendations for the Ministry of Education in BC

- The Ministry of Education reviews reasons, rationale, and utility for distinguishing students with behavioural concerns from those with mental illness as most children and youth identified with E/BD have comorbid disorders; many have both internalizing and externalizing disorders; and it may be unclear if some mental health concerns such as conduct disorders are to be categorized as behavioural concerns or as mental illnesses.
- The Ministry of Education reviews reasons and rationale for identifying students by both their presenting behaviours as well as causal factors, (i.e., “social problems such as delinquency, substance abuse, child abuse or neglect”) as identification from causal factors does not recognize that most E/BD problems in children and youth have numerous causal factors and cannot be limited to parent behaviours.
- The Ministry of Education provides philosophy, definitions, and descriptions of the system of care interventions that it recommends, “integrated case management” and “wrap-around” as “integrated case management” is not well described for the education context in the literature and “wrap-around” may maintain the philosophy of “wraparound”, however, not each of the 11 core principals of wraparound align with current practice in BC.
- The Ministry of Education assists school districts develop common language to describe behaviours so that the behaviours students exhibit are commonly understood within districts and when students with E/BD move from one district to another.
- The Ministry of Education provides clarification as to how school districts are to determine diminished school performance for students identified with E/BD, as the effects of E/BD on academic achievement are recognized to lag behind the emergence of disorders. Disorders may only be recognized up to 6-8 years after the signs and symptoms of the disorder emerge, thus making it difficult to determine optimal levels of school performance.
- The Ministry of Education maintains full reporting of secondary identifications so that a more complete reporting of a student’s needs that may have an significant impact on his/her ability to be successful in school are maintained.
• The Ministry of Education collects information about the specific or concurrent disorders of children and youth identified with E/BD so that information can continue to be provided on the Ministry of Education website to inform schools about appropriate interventions for students with the most common concerns, and so that trends and common concerns can be tracked and addressed system wide.
• The Ministry of Education collects information and reports back on the length of time individual students have been identified with E/BD as well as any other identification students have or have had so that school districts are aware of historic and present student needs.
• The Ministry of Education tracks the grade-to-grade transition and graduation rates of students who were identified in the E/BD categories in elementary school but who were no longer identified in the E/BD categories in high school in order to determine the rates of success of these students who received early intervention.
• The Ministry of Education tracks E/BD students in open-ended settings for 5 years after ordinary expected graduation to see how many of these student complete graduation requirements for a BC “Dogwood” Certification, as well as to see if alternate schools help these students achieve graduation, and to see how many of these students may complete high school requirements through adult facilities or distance education over a longer period of time.

5.5.5.3 General Recommendations for the Sunnyville School District

• The Sunnyville School District helps all students develop the qualities or assets needed to attain the characteristics of mentally healthy children and youth.
• The Sunnyville School District helps all students, including those with E/BD, to reach developmental, cognitive, social, and emotional benchmarks; as well as have secure attachments and satisfying social relationships so that they can successfully deal with the events, challenges, and stresses they encounter in their daily lives (The Public Health Agency of Canada, website; The U.S. Department of Health and Human Services, 1999).
• The Sunnyville School District helps all students develop well-being so that they can increase their capacities, resources, and resilience to successfully deal with the events, challenges, and stresses they encounter on the way to adulthood.
• The Sunnyville School District uses the characteristics and dimensions of mentally healthy individuals as a guide or framework to describe the mental health/wellness of students, to note areas in which growth is indicated, and to establish goals for intervention for children and youth who need to further develop qualities of mental health and well-being so that they do not develop paths of maladaptation.
• The Sunnyville School District teaches all students how to manage their behaviours including their fears, anger, sadness, and impulses so that all students function more positively. The teaching of students identified with E/BD how to better manage their behaviours needs is a part of a system wide approach to positive behaviour management.
The Sunnyville School District monitors the health and well-being of all students. The monitoring of behaviour for students identified with E/BD and for students once identified with E/BD but no longer identified is a part of system wide monitoring of all students.

The Sunnyville School District ensures that all students have strong starts in Kindergarten and the district puts effort into developing good relationships with parents as well as with all children at school entry. To facilitate strong starts, the Sunnyville School District provides parent/caregiver training focussed at the Kindergarten level.

The Sunnyville School District provides in-service and support to teachers to help them identify and respond to dysfunctional thinking patterns in students including: overcoming learned helplessness; the development of student engagement; as well as learning strategies for students who engage in overgeneralization, catastrophic thinking, maximizing and minimizing, all-or-none (black-or-white, absolutist) thinking, jumping to conclusions, personalization of issues, selective negative focus, and a lack of engagement.

5.5.5.4 Recommendations Specific to School Leadership

- School leaders seek to hire teachers who are sensitive; provide practical help; are patient; have a sense of humour; are fair; build positive bonds between themselves and students; and who set and support high academic expectations.
- School leaders ensure that a variety of service delivery systems are in place in schools to support students identified with E/BD including: alternative education programs; lower student-teacher ratios in classes that maintain students with E/BD; classes with a variety of instructional methods; programs to improve academic skills and help “at risk” students; and a school within a school as well as community-based learning options.
- School leaders ensure that schools have a strong academic focus which decreases student conduct and oppositional problems as well as develops more positive student attitudes towards differences and perceptions of fairness.
- School leaders ensure that schools are welcoming towards all students, including those students identified with E/BD, and that all students are welcomed into schools and classes with transition procedures in place.
- School leaders ensure that school staff is consistent in discipline procedures and in the development and implementation of other procedures.
- School leaders ensure that social services and counselling are in place for students who transition back into integrated classrooms from alternate programs and schools.
- School leaders ensure that school staff and outside service providers record the measures uses to assist and support E/BD students and the observed results of these measures.
- School leaders ensure that they do not engage in blaming parents/caregivers and students for behaviours but that they work collaboratively with them to examine the educational context as to how it can be adapted for students’ needs.
- School leaders ensure that they develop students’ attachment to school by providing all students, including students identified with E/BD, opportunity to be part of clubs, activities, and teams.
- School leaders ensure that all students, including students identified with E/BD, are programmed for, in ways that give them opportunity to develop their social skills at school.
- School leaders seek alternatives to suspending students, including students identified with E/BD, and instead provide alternatives that develop students’ attachment to school rather than diminishing it. They seek opportunities for staff to be significant in the lives of students. When students are removed from the classes they ensure that monitoring occurs to avoid stigmatization or rejection of these students.
- Schools leaders program students identified with E/BD in the most inclusive settings possible so that they can develop healthy relationships with peers.
- When possible, school leaders reduce the number of teachers who teach a student with E/BD and they work towards having each student develop relationships with individual teachers who give emotional support, praise, encouragement, and who motivate them.
- School leaders implement a “check and connect” model that continuously and systematically assesses students’ levels of engagement by monitoring peer relationships, attendance, suspensions, grades, and credits earned. School leaders ensure that students are involved with the process and are provided with check indicators.
- School leaders discourage the placement of new, inexperienced teachers with no training and/or background in teaching students with E/BD as teachers in alternate classes or schools.

5.5.5.5 Recommendations for Specialty Services

Student Support Services Recommendations
- Student Support Services maintains a lending library and/or access to information about E/BD that includes intervention materials specific to school contexts and information specific to academic interventions for students with E/BD.
- Student Support Services collects information about the kinds of disorders students have in specific grades to support system wide intervention and to identify topics for system wide professional development.
- Student Support Services connects school based case managers system wide with community support services so that both can collaborate about the students they share in common. This facilitates the use of common approaches and provides opportunities for in-service beyond those provided around individual students.
- Student Support Services provides particular focus on behaviour management at school entry and in the intermediate grades before students transition to high school.
- Student Support Services provides additional parent training for parents/caregivers of Kindergarten students with behaviour challenges.
• Student Support Services identifies students who have been maintained as students with E/BD for long periods of time to assist schools in providing more focused intervention for them.

• Student Support Services collaborates with schools to provide information for students, their families, their community supports, and the school system when students’ identification as students with E/BD is removed. This information is a part of a transition plan and can include: information about available resources and how to receive support again if it should be needed.

• Student Support Services collects information about students who have had Ministry of Education identification removed and it collaborates with schools to put monitoring plans in place for these students.

• Student Support Services provides transition protocols and procedures to ensure that transition into programs, into services, and transition out of programs occurs efficiently and effectively. Transition processes are flexible for use throughout the school year and include procedures for transitions:
  o in and out of programs;
  o in and out of schools;
  o between districts; and
  o with community partners for students leaving school for any reason.

• Student Support Services encourages schools to work with parents and community partners by facilitating joint workshops with parent groups and community partners; by monitoring collaborative plans; and by providing simple, concise packages to schools with appropriate forms and outlines that are practical to use.

**Hearing Resource Related Recommendations**

• Hearing resource specialists are aware that many students identified with E/BD have experienced ear infections during early childhood.

**Occupational Therapy Related Recommendations**

• Occupational therapists remain available for consultation about specific students and provide additional consultation for strategies that could be used in classrooms.

**School Counselling Related Recommendations**

• District counsellors provide documentation for district files indicating that services have been received so that their involvement is recognized.

• Counsellors provide documentation of services received by students as well as the goals for counselling and the strategies used in counselling, as counselling services are an integral part of a system wide approach to address the mental health and well-being of students. This documentation helps to facilitate collaboration with the teams that support children and youth with E/BD. Counselling services involvement can be:
  o a part of a student’s individual education plan;
- reviewed for knowledge and understanding of past and present interventions;
- assessed for effectiveness for the student; and
- examined to ensure alignment of interventions within the school, home and community.

- Counsellors consider using more visual representation for students identified with E/BD.

School Psychology Related Recommendations

- School psychologists are aware of the higher rate of learning disabilities in students identified with E/BD as compared to the rate in the general student population.
- School psychologists are aware that students identified with long term conduct disorders or delinquent behaviours may have lower intelligence, particularly in verbal areas, and they may have executive functioning difficulties.
- School psychologists ensure that students recommended for E/BD identification are screened for skill deficits and academic delays.
- When assessing students identified with E/BD, school psychologists are aware of the widespread difficulties associated with these students including difficulties in the following areas:
  - visual-perceptual processing;
  - problem solving;
  - memory;
  - processing speed;
  - rapid automatic naming;
  - executive functioning;
  - visual motor integration; and
  - fluency in reading, mathematics, and writing.

Speech and Language Related Recommendations

- Speech and language therapists are aware of their role in a system wide approach to address the mental health and well-being of students.
- Speech and language therapists recognize the importance of screening students with E/BD (particularly those with externalizing disorders and attentional issues) for concurrent language disorders.
- Speech and language therapists consult with school based teams when students with E/BD are discussed as well as when programs are developed and implemented for them to ensure that speech and language needs are not overlooked.
- Speech and language therapists consult with teams that support students identified with E/BD to ensure that interventions for language difficulties are in place.
• Speech and language therapists assist schools to implement best practice interventions to address both a broad spectrum of general classroom interventions as well as specific interventions to benefit particular students.

5.5.5.6 General Recommendations for Teachers

The Curriculum
As described in the literature:
• teachers provide students with a curriculum that incorporates their own interests and issues.
• teachers use lessons with a scope and sequence.
• teachers provide students with academic knowledge and skills.

The Classroom Environment
• Teachers ensure that teacher interactions with students are positive.
• Teachers provide students with opportunities to build relationships with peers and teachers.
• Teachers rate the performance of students rather than their behaviour for grading.
• Teachers ensure that all students receive academic time with teachers.
• Teachers develop relationships with students that are characterized by warmth and open communication.
• Teachers treat students respectfully.
• Teachers maintain a positive classroom environment.

Instructional Strategies
Teachers implement instructional strategies from the literature that have been suggested as effective for students identified with E/BD. These include:
  o teacher-directed instruction;
  o direct instruction;
  o use of peer tutoring to increase engagement and reduce off task behaviours;
  o teacher feedback with positive consequences such as praise;
  o mediated scaffolding;
  o positive instructional strategies;
  o use of simple, conspicuous, instructional strategies;
  o skills taught directly and systematically;
  o teaching of self-management, self-monitoring, self-evaluation, self-instruction, goal-setting, and strategy instruction;
  o teaching of new information in a way so that errors and frustration are reduced;
  o use of frequent, low-level questions;
  o provision of opportunities for students to respond;
use of a “trial and error” method where the student is required to attempt a response and wait for a predetermined amount of time before prompting for the desired response;

- use of fast pace instruction with many opportunities for correct responding;
- alternating of low probability with high probability tasks;
- alternating tasks mastered previously with new tasks;
- teaching parts of tasks over a period of time rather than the whole task repeatedly;
- provision of choice in tasks;
- judicious review of instructional material;
- lessons that help students transfer newly learned skills;
- direct teaching of strategies such as “cover-copy-compare, time delay, modeling correct academic responding, dialogue journals, story mapping, guided notes, repeated reading, mnemonic techniques for understanding and remembering;
- use of data-based interventions;
- graphic visualizations of students’ progress to help motivate;
- provision of positive consequences for improvement;
- use of continuous assessment and monitoring of progress;
- use of curriculum-based assessment and measurement;
- provision of opportunities to practice new skills so that they are maintained;
- use of transition times between classes for the teacher to interact, ask questions, follow up on instructions, have conversations, introduce topics, and change topics appropriately;
- use of a sound amplification system to increase student attending to teacher instruction;
- avoidance or judicious use of collaborative group work for students with E/BD as they frequently lack the social skills to engage and learn in groups; and
- avoidance of work intended for students with learning difficulties or disabilities if the student with E/BD does not have learning deficits.

- Teachers make adaptations and/or modifications that are specific to students’ disorders. For example, students with an anxiety disorder may have trouble speaking out in class and may need adaptations made for assignments that include alternatives to oral presentations in class.

**Classroom Management Strategies**

Teachers implement classroom management strategies that have been suggested in the literature as effective for students identified with E/BD. These include:

- teaching and implementation of start of year classroom management activities;
o taking the time to have students understand classroom rules for all classrooms not assuming generalizations occur across settings or classes;
o teaching all students the expectations, rules, and scripts/routines for their classes;
o being aware that students with E/BD may try to control adults from misbehaviour when they receive instruction, which can result in less instruction; however, teachers continue to ensure that students with E/BD receive high quality instruction;

o teaching all students how to respond orally, work with peers successfully, ignore extraneous social cues, and pay attention to academic learning;
o maintaining fair and positive discipline;
o maintaining classroom rules;
o eliminating unessential rules;
o setting high behavioural expectations and providing the support to achieve these;
o providing students with structured and predictable routines; a consistent schedule; rules and consequences; as well as clear behavioural expectations.
o giving students voice in identifying discipline and classroom management practices that assist them in keeping calm and focused so they can be on task and complete their schoolwork;
o monitoring students for gaps in learning or faulty learning from when they were off task or out of the classroom;
o using positive behaviour support techniques;
o making efficient use of learning time;
o teaching social skills. They help students replace anti-social and maladaptive behaviours using social skills and behaviour modification training. They model and rehearse targeted behaviours with social reinforcement and programming for maintenance and incorporate generalization into academic instruction;
o maintaining smooth transitions between activities; and

o using functional behavioural assessment-based interventions.

Language Related Recommendations
As suggested in the literature, to address language related difficulties teachers:
• intervene early;
• involve speech and language therapists in the design, planning, and delivery of language related interventions;
• screen students with E/BD for semantic, syntactic, and pragmatic language difficulties;
• reduce background noise in class;
• when appropriate, sit at the same level as the student to converse;
• speak at a moderate pace, with brief pauses between phrases;
when speaking, attract the student’s attention, speak slowly, use short sentences with chunked information, pause between sentences while maintaining eye contact, and use visual cues. They then wait for compliance and, if after a pause a repeat the information is required, they restate the information slowly and simply and provide regular encouragement;

- monitor the length of the sentences used to enable re-explanations as necessary;
- use simple and compound sentences rather than sentences that are complex with several clauses;
- are aware that elaborate or abstract vocabulary and concepts may confuse;
- use and teach a variety of words to help students express their frustrations;
- use and teach broad and varied emotional vocabularies;
- use and teach a network of related concepts;
- provide students with opportunities to communicate appropriately in socially acceptable ways and provide appropriate consequences for appropriate communication;
- teach scripts or event based repertoire for difficult situations;
- identify the skills to be taught, model them, provide social reinforcement, and program in reinforcement;
- teach language as a part of the curriculum;
- use pragmatic language interventions including describing something to someone who cannot see it, describing objects and negotiating;
- articulate clearly and distinctly; and repeat as needed; and
- use pictures to teach.

To improve vocabulary and language, teachers:
- teach figurative language;
- teach vocabulary to describe concepts;
- teach words that have multiple meanings; and
- replace “why” questions with “what” questions.

Reading Related Recommendations

From the literature, to address reading related difficulties, teachers:
- use direct teaching to improve reading skills for reading decoding and oral reading but consider that this method may not encourage analytical or conceptual skills in oral and written work;
- use peer tutoring to provide reading interventions in a variety of areas;
- use one-to-one tutoring;
- use guided reading interventions such as repeat oral reading, with rereading of passages with pre-established criterion, immediate teacher feedback and guidance daily at a 95% accuracy rate so as to maintain a high success rate;
- use teacher modeling of passages as opposed to a computer model or no model;
- teach phonics instruction with a focus on phonological awareness;
• use story mapping to improve reading comprehension by identifying characters, setting, problems, events, and outcomes in the narrative text; and
• use text mapping to improve reading comprehension skills by having students read a passage and initially complete a teacher generated text map and then produce their own text maps.

Mathematics Related Recommendations
As suggested in the literature, to address mathematics related difficulties, teachers:
• use peer tutoring;
• use direct teaching;
• use self monitoring, strategy instruction, interspersing easy problems among more difficult problems to create momentum with tangible reinforcement;
• use visual imagery and auditory cues to help students’ memory for math facts;
• discourage use of multiple-choice responses for teaching complex mathematical principles;
• discourage use of a reduced number of questions; and
• use a musical mnemonic technique to increase memory.

Writing and Spelling Related Recommendations
As suggested in the literature, to address writing and spelling related difficulties, teachers:
• use self-regulatory strategies; and
• use a model.

5.5.5.7 Recommendations Related to School Dropout
As suggested in the literature, recommendations to reduce school dropout include:
• finding ways to have students reduce drug or alcohol use;
• encouraging student to work less than 15 hours a week;
• finding ways to improve student achievement, test scores, and grades;
• finding ways to improve students’ progress in school with enough credits to graduate;
• finding ways to keep students caught up to grade in course credits;
• finding ways to improve students’ self esteem;
• finding ways to improve teacher and peer relationships;
• finding ways to reduce discipline referrals;
• finding ways to increase students’ friendships at school;
• finding ways to help students’ maintain friends who are in school;
• ensuring that students have teachers who are significant to them;
• finding ways to ensure higher school engagement at school entry and to maintain that engagement over time;
• having students maintain good attendance at school (particularly in Grade 1);
• having primary age students maintain consistency in caregivers;
• finding ways to ensure students have high educational aspirations;
• finding ways to build higher commitment to school;
• ensuring that students are taught in inclusive environments;
• having students at risk attend smaller schools;
• finding ways to have families provide support in primary grades through homework help and high expectations;
• working with students to maintain their achievement levels in reading, mathematics, and written language;
• ensuring that all students are able to be successful;
• finding opportunity for students to socialize with peers at school;
• having teachers who take time to talk with students individually and who work with them, make the class fun, and encourage them;
• facilitating student involvement in their own educational planning based on their post-school goals; as well as having them participate in the development of their own individual education plans;
• supporting students with interagency collaboration: emphasizing involvement of various participants through the use of interagency agreements, including working with community businesses so that the curriculum will be relevant to post-school employment, and that academic and vocational services are coordinated and integrated;
• involving families in planning and facilitating family involvement in transition planning and transition-focused-education through training and empowerment with parent empowerment; and
• providing flexible schedules, alternatives to suspensions, and needed supports.

5.5.5.8 Recommendations Related to Postschool Outcomes

Recommendations related to postschool outcomes include:
• encouraging students to develop life, employment, and occupational skills;
• providing school, and work-based instruction with a focus on self-determination;
• taking time with students for goal setting and attainment; problem solving skills; leisure skills; employment skills instruction including employability skills, occupationally specific programming and on-the-job training; independent living skills; and, the presence of a “helpful class” and “helpful person” to assist them to prepare for adult life;
• providing students with job awareness, exploration, preparation, as well as orientation; using resource people within the school as well as parents and others within the community with different occupations to provide students with mentorship for jobs; providing school as well as post school vocational services and career education that help place students with E/BD into jobs following graduation; give them training that orients them to the world of work and satisfying career decisions that make their education more meaningful for them.
• involving community businesses in curriculum development so that curriculum is relevant to post-school employment.
• working with community to coordinate and integrate academic and vocational services for students.

5.5.5.9 Recommendations Specific to Support Teachers

• Support teachers are aware that support for students identified with E/BD consists of far more than the control of behaviour; it also consists of improving the students’ academic achievement. The individual education plans developed for students with E/BD recognize that the academic achievement of students is affected by their E/BD and that goals need to be established to address their academic development.
• Support teachers are aware that although students need to behave in order to learn; students who are learning exhibit improved behaviour.
• Support teachers use a variety of approaches to support students with E/BD as no single model or approach encompasses the complexities of working with students with E/BD.
• Support teachers are aware that there is an important role for them in conducting research and connecting with researchers to participate in meaningful, on the ground, research for students identified with E/BD in settings that are realistic for them and find opportunity to collaborate with clinical researchers and other researchers to share their knowledge.
• Support teachers are aware that much research about children and youth with E/BD has been conducted outside the field of education. Support teachers are aware that they benefit from being familiar with some of this research, particularly in the area of implementation strategies.
• Support teachers involve classroom teachers when setting up accommodations for students with E/BD and when implementing them.
• Support teachers use assessment information, student post-school goal information in educational planning for students with E/BD.
• Support teachers involve students in their own educational planning.
• Support teachers screen all students with E/BD for academic skill abilities.
• Support teachers monitor students with early reading disorders for E/BD and students with E/BD for reading disorders knowing that students with both E/BD and reading disorders have worse outcomes than students with either disorder alone.
• Support teachers provide students identified with E/BD with ways to be helped when they are having a bad day.
• Support teachers provide students identified with E/BD with opportunities to talk about emotional problems.
• Support teachers match interventions with students’ needs.
5.5.5.10 Recommendations Specific to Students in Alternate Classes or Schools

- Teachers of alternate classes or in alternate schools are aware that the education provided in alternate settings is relevant and it helps students grow academically and behaviourally.
- Teachers in alternate classes and schools ensure that transition plans are in place
  - for students to return to regular classes and schools;
  - for students when they come into alternate settings; and
  - for students when they transfer out of alternate settings into postsecondary education or jobs.
- Teachers in alternate classes and schools ensure that students with E/BD receive curriculum and instruction that includes:
  - activities that help students grow academically and behaviourally;
  - curriculum developed in collaboration with the student;
  - curriculum and instruction that is adapted or modified as needed;
  - direct teaching in missed and new skills;
  - individualized or differentiated reading instruction that meets students’ individual needs;
  - exposure to rich vocabulary at their grade level;
  - career and vocational training; and
  - instruction that teaches students how to learn and study.
- Teachers in alternate classes and schools avoid:
  - giving work that predominantly consists of independent seatwork and worksheets;
  - maintenance of silence over academic learning;
  - grading of all students the same way;
  - placement of students in low ability tracks if they aren’t needed; and
  - set programs that repetitively expose students to the same material.
- Teachers in alternate classes and schools:
  - monitor the class for students who spend time out of the class or off task;
  - monitor any cooperative learning groups for successful accomplishment of tasks;
  - limit oral work near to students trying to do seatwork for students who may get distracted;
  - support students’ mental health issues;
  - ensure structure in classrooms; and
  - maintain classroom management for teaching.

5.5.5.11 Recommendations Related to Parent Involvement

- School systems are aware of the reasons parents are not involved at school. These include:
  - not seeing their role as being involved at school;
- a lack of comfort with the school because of prior, personal experiences;
- socioeconomic status differences that make them feel uncomfortable at school;
- territorialism and attitudes from the school that do not encourage or promote parent involvement;
- language difficulties that limit communication with the school;
- community characteristics that do not encourage parent involvement at school; and
- a lack of knowledge or training on how they can work together with the school.

- Schools involve parents in transition planning and transition-focused education through training and empowerment.

**5.5.5.12 Recommendations Specific to Low Income Families and Families Living in Poverty**

- School systems align policies and procedures regarding homework and parent-teacher conferences with research-based practices.
- School systems explicitly discuss the roles of parents, teachers, and students in learning standards, homework policies and in other topics that make a difference to learning success.
- School systems focus on parent education in areas such as home reading and study habits.
- Schools systems provide outreach to families through home visits, family nights and a family resource library.
- School systems and communities monitor children and youth living in poverty, paying particular attention to those children and youth living in persistent poverty to support them to be successful in school.
- School systems and communities help children and youth with low income/poverty related challenges by recognizing these challenges and by making adaptations when needed for issues such as nonflexible work schedules that make it difficult for parents/caregivers to attend meetings or school events; a lack of resources to support learning at home; transportation challenges; and ongoing stress from financial struggles.
- School systems encourage high parent involvement in school and high parent communication with the school for students living in low income families and/or children living in poverty as this involvement may improve the school performance of students from these homes.
- School systems and communities recognize and facilitate association of children from low income homes or children living in poverty with children, families, and community members from higher economic status neighbourhoods to provide opportunity and possible mentorship.
5.5.5.13 Recommendations Specific to Children and Youth “In Care”

- The Sunnyville School District is aware that many students identified with E/BD reside “in care”.
- The Sunnyville School District recognizes that many students living “in care” who are identified with E/BD have significant issues related to parenting that may need to be considered and addressed.
- The Sunnyville School District recognizes that students “in care” often have higher rates of E/BD, poorer health, and lower average cognitive ability and that they need to be monitored for difficulties including depression, psychiatric disorders, school dropout, and criminal involvement.
- School systems recognize that many students “in care” have experienced frequent school changes and, as a result, have gaps in their learning. School systems help these students to fill their learning gaps.
- School systems recognize that students “in care” have life outcomes associated with their removal from the home and they may need extra help in reading, writing, and mathematics as well as help to graduate and go on to postsecondary education and/or a career.
- School systems specifically address the special needs of students “in care”, recognizing that students “in care” have done better when they were supported by a system of care interventions, when they were better readers, when they were involved in extracurricular activities, and when they had positive school experiences. They also recognize that having goals, social support, more discipline, and good role models are also beneficial for students “in care”.

5.5.5.14 Recommendations Related to Community

- Professionals who provide assessments containing diagnoses provide clarity as to whether a student is identified with a disorder or whether a diagnosis is probable but not indicated, in order to avoid confusion for individuals, parents/caregivers, and school systems.
- Community networks continue to meet to discuss and act on issues relevant to children and youth.
- Communities monitor neighbourhoods and communities for signs of disorder, violence, as well as conditions and situations that disrupt parenting practices.
- Communities monitor neighbourhoods and communities for the availability of support services for youth.
- Communities support youth who choose to quit school in order to support their return to school and/or to support them to attain training or work in the community.
- Communities collaborate with schools to undertake common research, provide collaborative intervention systems, and allocate resources to address common goals.
Communities focus on working together in system of care interventions for children and youth with E/BD, particularly for youth in Grades 8-10. In working together they:

- have a purpose for meeting and objectives to accomplish;
- work with power differences ensuring that each member of the team is an equal partner with participation and a role on the team;
- build an understanding relationship with each other;
- work out who is going to be involved with the child and youth as well as to what extent;
- remain mindful that system of care teams of 4-8 members including the child/youth and their parents/caregivers are associated with higher effectiveness and that teams with more than 8 members may be associated with less effective results for the child/youth;
- remain mindful that caregiver stress for parents/caregivers of children and youth with E/BD is generally increased with more services received so service providers attempt to provide services more comprehensively rather than by providing more services delivered by numerous organizations;
- coordinate multi-component treatment that addresses academic skills; social skills; social and family services; counseling or psychological therapy; and medical treatment;
- provide treatment matched carefully and specifically to the nature and severity of problems; and
- remain committed to prolonged sustained intervention.

Families recognize the role that they can have on collaborative teams to support their child including:

- knowledge of their child’s background, developmental history in medical, social, and educational contexts;
- knowledge about the nature of their child’s problems;
- knowledge of factors that contribute to their child’s problems;
- knowledge of how their child’s problems have progressed;
- monitoring of their child in high risk situations;
- knowledge of their child in different contexts;
- knowledge about the informal assistance and social supports available to them;
- opportunity for more reinforcement of desired goals; and
- knowledge of possible interventions that may work for their child.

5.5.5.15 Actions Steps for Students

- Students ask their parents/caregivers to be involved in their education.
- Students participate in planning on their own behalf.
- Students discuss their needs, what works for them; they share their difficulties and their successes.
5.5.5.16 Actions Steps for Schools

- Schools take steps to have children and youth:
  - play;
  - develop positive peer relationships;
  - read;
  - attend school regularly;
  - bond to school;
  - expect and encourage their parents to be involved at school;
  - learn problem-solving skills;
  - learn social skills;
  - connect with community organizations;
  - build attachment to their families;
  - be positively involved in their family;
  - be involved in school life;
  - gain positive reinforcement from academic achievement; and
  - identify with school and educational attainment.

- Schools work with parents. They:
  - work towards reducing any parental hostility;
  - invite parents into schools; and
  - expect and appreciate parent involvement at school.

- Schools take steps to have parents:
  - know what is happening at school;
  - know school policies;
  - embrace education;
  - encourage reading at home;
  - monitor and limit electronic media at home;
  - discuss education with their children; and
  - get involved in the education of their children.

- For homework, schools take steps to:
  - inform parents about best practice study habits;
  - encourage parents to provide a place and a time for homework to be done; and
  - encourage parents to help their children with homework when they have a particular expertise in an area.

- Schools monitor children and youth. In particular they monitor:
  - children and youth who live in persistent poverty; and
  - children and youth (particularly those in adolescence) for the onset of mental health disorders.

5.5.5.17 Action Steps for Parents and Caregivers

Some action steps are encouraged for parents.

- Accept your child.
• Give emotional support to your child.
• Expect the best for your child.
• Be interested in the education of your child.
• Learn to identify with school and educational achievement.
• Positively reinforce academic achievement.
• Increase your own level of education.
• Listen to your child.
• Encourage your child
  o to play;
  o to develop positive peer relationships;
  o to read;
  o to attend school regularly; and
  o to bond to school.
• Talk to your child about:
  o his/her experiences at school;
  o your values about education; and
  o postsecondary education.
• Teach your child:
  o problem solving skills; and
  o social skills.
• At home:
  o be positively involved with your family;
  o encourage reading;
  o monitor and limit electronic media;
  o be involved in interactive learning activities with your child; and
  o encourage fathers to be interested and involved in education.
• For homework:
  o provide your child with a place and a time for homework completion;
  o learn about best practice study habits;
  o help younger children with their homework; and
  o give help for older children when you have particular expertise.
• Be aware:
  o There are key times to maintain parent monitoring and involvement.
    These are at entry to school and in Grades 6 and 7.
• Be informed:
  o about what is happening at school;
  o about school policies;
  o about homework policies;
  o about expected roles for students, parents, teachers, and community members; and
  o about best practice home reading and study habits.
• Be involved at school each and every year your child is in school.
  o Find ways to work collaboratively with schools.
Volunteer at school.
Go to plays, concerts, sporting events, family nights, and information sessions at school.
Attend parent-teacher conferences.
Be involved in decision making and policy development at school including involvement related to policies and procedures about homework.
Know that being involved at school when your child is in Grade 12 encourages school completion and it better facilitates students’ postsecondary transition.
Be involved in transition planning and transition-focused-education training for your child.
Share with the school information about
- the nature of your child’s problems.
- factors that contribute to your child’s problems.
- possible interventions that may work for your child.
Allow home visitations from the school.
• Be involved on the teams that support your child.
  Help to decide who will be on the team to support your child.
  Help the team decide how much collaboration will happen among team members.
  Be an active member of the teams that support your child or youth.
  Share your strengths with the team.
  Help the team to set priorities.
  Help the team to set plans in place that are flexible and address different needs and contexts.
  Help the team to retain services in the community when possible, with least restriction.
  Gain enough information and access to care providers so you can make informed decisions.
  Let the team know your family values.
  Make sure that the team works from a strengths base.
  Help the team to evaluate services.
  Accept and receive training to increase your skill to intervene with your child or youth.
  Help the team to make use of the supportive people in your family and social group.
• Be involved in your community
  Connect socially with other families.
  Connect with community organizations.
  Monitor the community for services that may be available for your child.
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