

1-1-2009

# An investigation of a strength-based model as an approach to helping children cope with a learning disability

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AN INVESTIGATION OF A STRENGTH-BASED MODEL AS AN APPROACH TO  
HELPING CHILDREN COPE WITH A LEARNING DISABILITY

by

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BA (Honours), York University, 2006

A Major Research Paper

presented to Ryerson University

in partial fulfillment of  
the requirements for the degree of

Master of Arts

in the Program of  
Early Childhood Studies

Toronto, Ontario, Canada, 2009

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## Author's Declaration

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## AN INVESTIGATION OF A STRENGTH-BASED MODEL AS AN APPROACH TO HELPING CHILDREN COPE WITH A LEARNING DISABILITY

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Master of Arts  
Early Childhood Studies  
Ryerson University

### Abstract

Interventions used in helping children with learning disabilities (LD) should consider the impact on the whole child and not only on his/her academic success. This approach may foster the development of unique strengths in the child, unlike those approaches that focus only on the areas of difficulty that the child is experiencing. An approach of this nature focuses on competence generally and differs greatly from traditional approaches, which ignore the importance of non-academic skills in children. The following study investigated the experiences of children with LD and their parents who are enrolled in a strength-based program. Interviews on their perceptions about the program and evaluation of the literature indicated that a strength-based program is effective in helping children cope with an LD. The major themes evoked from interviews include recognition of strengths, dependence versus independence in the public school, and life experience with an LD.

Key words:

*Learning disabilities, children, strength-based approach, intervention, coping*

## Acknowledgements

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I would like to thank the parents and children who participated in this study. I would also like to thank the LDAYR, who provided me with access to these individuals; your time, effort, and patience were very much appreciated. Thank you to my supervisor, Dr. Gloria Roberts-Fiati, who helped and guided me throughout this project from beginning to end, and to everyone else, who has believed in me throughout this journey, you have all been a great support. I would like to acknowledge my brother Winston, who has instilled in me the important values of life.

## Dedication

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To my father, who has always encouraged me to 'try again' and to continue to aim for the goals I desire. Thank you for your support Daddy, you have never given up on me and have always believed in me. I also dedicate this to the person who completes me, Yuli; I could not have done this without you.

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## Introduction

*"I don't seem to remember them saying anything about his strengths! I remember them saying about him being behind, not aware of danger and runs quick, fast... that's what I remember... His personality is nice! He tries to... engage (Parent)."*

*"He doesn't... see his strengths. That's what I think part of the problem is ... it makes me feel bad because he doesn't... see all the good qualities he has... (Parent)"*

In spite of the fact that education systems today are in the process of transformation, there continues to be obstacles for some students (Ada & Campoy, 2004; Kea, Campbell-Whatley, & Richards, 2004). On the one hand, education systems are becoming institutions that allow for an independent learning experience so that all students have the opportunity to succeed using their own sources of knowledge (Gonzalez, 2005; Moll, Amanti, Neff, & Gonzalez, 2005). On the other hand, children with learning disabilities (LDs) often do not enjoy such independence in their learning (Slee & Allan, 2001). Jackson, Harper, and Jackson (2001) describe today's students as being involved and empowered in learning. That is, children who are empowered are given opportunities to think about their own skills and abilities, and take ownership of their learning when being taught; this leads to self-directed learning. Independent learning enriches students' life skills and prepares them to become citizens who make valuable contributions in their own future success. As a result, when students realize that the internal and external characteristics they possess can be capitalized on, and they discover their own strengths, they become autonomous learners with the ability to

perform to their full potential (Rhee, Furlong, Turner, & Harari, 2001; Scales, Benson, & Roehlkepartain, 2000). While this transformation is taking place in some areas of the public school system, children with LD continue to function outside of these changes.

Traditionally, Canadian children learn academic or life skills as part of the culture's formal education system. In a classroom this learning takes place when students acquire information provided by their teacher, and retrieve it when needed, such as on formal tests or assessments (Gardiner & Kosmitzki, 2008). This process however, does not allow for an independent learning experience where the child actively participates in acquiring new information. Rather, it allows for a passive learning experience, which involves the teacher instructing and the student listening (Ada & Campoy, 2004). Moreover, a passive learning experience fails to regard what the student brings to the classroom, like their individuality, their weaknesses, and their strengths. The reality is all children learn differently (Hitchcock, 2001; Rose & Meyer, 2002). Therefore, in a typical mainstream Canadian classroom, some students will not have any difficulty acquiring information through passive learning, while others will, and particularly those with LD. Ironically, it is the children with LD who are more likely to be instructed by the methods that foster passive learning, even while the school system is in transformation. The present study will investigate children with LD and their parents' perceptions of how a strength-based program utilizes children's strengths in helping them to cope with an LD.

## The Social Problem

Both Boyd-Franklin (1991) and Resnicow, Ross-Gaddy, and Vaughan (1995), show that the behavioural and emotional strengths such as spirituality, strong work ethic, and value for education that children and their families possess, are often ignored and not accounted for in traditional classrooms or on standardized tests. This omission may be a contributor to the greater difficulties faced by students deemed learning-disabled, and their strengths may be outside of the traditional academic subjects taught in the curriculum. Also, students' performance on the tasks presented in standardized tests are often used as a measure of their ability, even though it may be a reflection of their difficulty in using this medium of assessment, which is not sensitive to the strengths and weaknesses of the learner (Edwards, Mumford, & Serra-Roldan, 2007).

Not all children learn using the same methods (Alty, Al-Sharrah, & Beachman, 2006; Bayliss & Livesey, 1985; Isaki, Spaulding, & Plante, 2008). Moreover, no single method can reach all children, especially in diverse Canadian classrooms that consist of students from varying backgrounds with varying learning styles. Research shows that classrooms should tailor teaching and intervention models based on individual learning styles and the students' cognitive abilities (Hitchcock, 2001 & Rose & Meyer, 2002). Once individualized, classrooms will provide all students the opportunity to display their potential for academic success, without the restriction of the expected learning style of the teacher or of that school.

The identification process of any mental disorder has a significant influence on the intervention that follows (Wing, Leekam, Libby, Gould, & Larcombe, 2002).

Therefore, during the initial assessment, when there is consideration of the strengths the individual possess, there is a creation of an altered concept of learning and individuality. According to Meyer and Rose (1998), this concept leads to more flexible and diverse teaching, which allows all learners the opportunity for support, challenges, and engagement. However, in the assessment for LD, teachers and other evaluators are more likely to focus on children's weaknesses than on their strengths.

The academic success of some students stem from such attributes as awareness of their strengths, weaknesses, learning styles, and emotional coping strategies (Goldberg, Higgins, Raskind, & Herman, 2003). For children with an LD, these attributes are imperative to their successful academic development. Unfortunately, these are hardly emphasized in mainstream classrooms or in the assessment process (Edwards et al., 2007). So how are students with LD expected to reach their full academic development?



## The Inquiry

### Study Objective

The consulted literature indicates that there are significant gaps in the role that children, teachers, and parents play in helping students with LD discover their strengths. These gaps exist for various reasons, ranging from research efficacy to researcher characteristics. For example, a study by Gifford (2004) proposes a new principle for parents who want to teach mathematics to their children with LD. This principle holistically considers the cognitive, physical, and emotional characteristics of the child. The principle is also promoted pedagogy, with emphasis on multisensory learning, large-scale activity, self-esteem, and agency in learning. Overall, this study was successful in making learning more efficient for children with LD. However, there is no evidence in the literature that shows that the study was replicated, especially because it was conducted in England, therefore, may be only applicable within that specific cultural context. Despite the fact that the study's principle appears ideal for Canadian strength-based programs, it may not be conducive in a Canadian context.

The work of Gersten and Smith-Johnson (2000) also points out gaps in the field. They suggest ways that students with LD can improve in their writing skills. For instance, the process involves teaching writing in an informal manner that consists of simply listening to tutors. These tutors suggest common-sense learning strategies such as, slowing down and spending more time on the process when learning to write. These basic learning strategies however, are for students with LD at the post secondary level, thus

omitting students at the elementary or secondary level of school. Replication of this study with a different group of students with LD may yield different results.

Furthermore, there is evidence that suggests teachers are unaware of effective teaching strategies for use in a classroom with students with LD. Teachers speak of being frustrated because of their inability to teach to target each student's learning style (DeSimone & Parmar, 2006; Harlin, 2008). Teachers must also be able to manage the behavioural/social problems that some of their students with LD exhibit.

When teaching children with an LD, research shows that the approach used should consider their unique learning modes in order to facilitate their academic success (Peters, Johnstone, & Ferguson, 2005). Since there are specific LDs that a child may have, the learning style manifested from those LDs becomes one of the child's strengths, which teachers can use when teaching (Reid & Weatherly Valle, 2004). Since children may present with different types of LD, there is a need for individualized responses to their needs. A child with a nonverbal LD for instance, may have difficulty learning through an auditory mode but may be proficient in tactile or interpersonal learning.

The efficacy of different modes of interventions has not become evident to teachers and subsequently to parents and children over the years. This lack of evidence may be because studies have not been replicated or elaborated. For instance, the method of these studies may appear to be sound, valid, and reliable; however, without evidence of their generalizability, readers may not acquire adequate confidence in order to implement what is being proposed (Cozby, 2004). The present study thus examines parents and children's perceptions on the ways in which a strength-based program utilizes

children's strengths and non-academic attributes to help children cope with an LD.

Participants' experiences are compared to the limitations identified in the literature that describe conventional/traditional approaches to helping children with LD.

This study utilizes a semi-structured interview method to gain an understanding of parents and children's perceptions. It focuses on exploring ways in which a strength-based approach helps children cope with an LD, in contrast to approaches used in traditional programs that do not place emphasis on children's strengths. In conceptualizing strength-based approaches, the study investigates how the use of strengths to capitalize on various learning styles help a child to succeed in areas that he or she may have difficulty.

This study examines the literature on traditional approaches and discusses their limitations, then examines parents and children's experience in a strength-based program to draw a conclusion about whether the strength-based program is effective in helping children cope with an LD. Through examination of the existing literature on traditional/conventional programs, the implications of this study demonstrate that there is a difference in how children cope with an LD when they are recipients of a strength-based program versus when they are students in a mainstream classroom. The diversity of students in a public school in Canada calls for a strength-based approach that is more suited to their individual needs.

### Operational Definitions

Throughout this study, LD refers to deficits in one or more of several domains, highlighting the different LDs a child may have. Some of these LDs include reading, mathematics, written expression, and nonverbal learning disabilities. The DSM-IV-TR (diagnostic and statistical manual of mental disorders –fourth edition text revision) definition of LD helps to clarify its meaning in the context of the present study as follows:

*Learning disabilities:* ...diagnosed when the individual's achievement on individually administered, standardized tests in reading, mathematics, or written expression is substantially below that expected for age, schooling, and level of intelligence. The learning problems significantly interfere with academic achievement or activities of daily living that require reading, mathematical or writing skills. A variety of statistical approaches can be used to establish that a discrepancy is significant. *Substantially below* is usually defined as a discrepancy of more than 2 standard deviations between achievement and IQ. A smaller discrepancy between achievement and IQ (i.e., between 1 and 2 standard deviations) is sometimes used, especially in cases where an individual's performance on an IQ test may have been compromised by an associated disorder in cognitive processing, a comorbid mental disorder or general medical condition, or the individual's ethnic or cultural background. If a sensory deficit is present, the learning difficulties must be in excess of those usually associated with the deficit. ...may persist into adulthood. **Associated Features...** Demoralization, low self-esteem, and deficits in social skills may be associated... Many individuals with....

Attention-Deficit/Hyperactivity disorder... also have Learning Disorders. ...Standardized tests to measure these processes are generally less reliable and valid than other psychoeducational tests. ...frequently found in association with a variety of general medical conditions (e.g..., fetal alcohol syndrome...). (DSM-IV-TR, 1994/2000, pp 49-50).

In the present study, LD is used in the most general sense to indicate that children are having difficulties in one or more learning domains and it hinders their academic achievement and interferes with their activities of learning.

Strength-based models foster “positive youth development”, hence the terms are used synonymously throughout the literature. Because of its increasing interest, particularly in relation to children with a mental illness like LD, it is important to understand positive youth development as a construct. Huebner, Walker, and McFarland (2003) clearly state the elements of positive youth development such that:

*Positive Youth Development:* First, describes something young people do —the natural process of learning, growing, and changing. Second, ... describes the philosophy of understanding young people characterized by a strength-based approach to the experience of childhood and adolescence. Third, ... describes a way of working with young people, one that values their participation, contribution, and unique personal characteristics. (p. 205).

*Strength-based approach:* examines the positive traits of individuals, such as, athleticism and intellectual functioning, which are traits that can be developed and utilized to enhance a child’s well-being. Furthermore, the strengths are valued regardless of its

relationship to negative developmental outcomes. A strength-based approach examines factors outside of the individual, such as family functioning and peer relationships. Thus, both internal and external characteristics are endorsed. This approach empowers individuals to take responsibility and independently navigate their own life experiences. With a focus on resilience, empowerment, hope, healing, and meaning construction, strength-based approaches do not endorse such concepts as deficits, disease, labels, and problems (Cowger, Anderson, & Snively, 2006; Rhee, et. al, 2001; Shimerson, Sharkey, Nyborg, & Furlong, 2004).

#### Characteristics of the Strength-Based Program Used for this Study

The Learning Disabilities Association of York Region (LDAYR) is a non-profit organization that provides services to advance the full participation of children, youth, and adults with LD in today’s Canadian societies. This organization has a belief in social justice and the value of diversity and inclusiveness as well as a dedication to individuals with LDs to achieve the best quality of life, and to be fully included in a society. The “ABCs 123s” tutoring program works by building the numeracy and literacy skills of children with LD or at risk for developing an LD. It does so by training tutors to work one-on-one with children and their parents to discover and appreciate learning strengths and to build on these strengths to help children improve in school. The organization provides tutors with teaching material (books, stickers, crayons, etc.) and a manual that is comprised of suggestions and strategies for how to teach using the child’s strengths and unique skills. “Social Skills” (friendship class), is a program that is also offered at the LDAYR. Directed toward the development of social skills and social problem solving

strategies, this program specifically targets the social and behavioural problems that most children with LD face (The LDAYR, 2009).

## Scope

This study documents the experiences of parent and child recipients of the LDAYR program. It examines their perceptions of strengths and recognition of it in relation to LD. This examination is to determine whether the program sufficiently highlights strengths to deliver an effective strength-based method to help children cope with an LD.

A mainstream classroom in Canada typically consists of no more than a few students with LD; each student may have a different LD than the other (Ontario Ministry of Education, 2009). For this reason, the present study did not exclude any potential participants; thus, all types of LD were included. Children who have a dual diagnosis however, were excluded from the study. Dual diagnosis may include an LD and a sensory or behavioural disorder; sensory disorders may be blindness, deafness, or physical developmental disorders such as cerebral palsy; behavioural, emotional, or psychological disorders may include conduct disorder, schizophrenia, or clinical depression. Attention deficit and attention deficit hyperactivity disorder (AD/HD) were however accounted for in the study since all participants were labelled, either by a parent or by a professional, as having this deficit. Moreover, ADHD is a disorder that often co-occurs with LD (Fletcher, Shaywitz, & Shaywitz, 1999).

Although, effective use of strength-based approaches in interventions for emotional and behavioural distress have been extensively documented, there is little evidence of its use in the area of LD in children (Cox, 2006; Edwards, Mumford, & Serra-Roldan, 2007; Huebner, Walker, & McFarland, 2003). For instance, the researchers

who write about LD do not document current intervention and teaching strategies that foster strength-based attributes, such as learning style. An exception to this is children with LD, who have certainly been a part of the research in the area of strength-based interventions, but only those children who have been labelled gifted/LD (Mann, 2006; Yong & McIntyre, 2001).

Furthermore, teachers have made it clear through interview and questionnaire studies, that it is a challenge to teach in classrooms with students who have an LD (DeSimone & Parmar, 2006; Dockrell, Lindsay, Letchford, & Mackie, 2006; Forrest, 2003; & Harlin, 2008). These studies indicate that effective interventions are not available to teachers in public schools; therefore, without an effective approach, that targets individual strengths and learning styles, how will teachers help students with LD reach their full potential? The present study documents the experiences of recipients of the LDAYR program. Teachers may use this strength-based approach so that all their students have the opportunity to reach their full potential within and outside of the academic realm.

Efficacy of strength-based approaches have not extensively been researched in the area of LD. Strength-based approaches however, have been researched and described in the literature as a method that helps children reach their full potential (Huebner, Walker, & McFarland, 2003; Meyer & Rose, 2002). Therefore, this study evaluates the existing literature and analyzes interviews of children and parents of a strength-based program to gain a perspective on the effects of this approach as an alternative to traditional/conventional approaches in helping children cope with an LD.

## Theoretical Framework

Both, Maluccio (2000) and Tyler (2002) have used a psychosocial competence practice framework when discussing individuals with mental health problems. The current study also predicates on this framework. This framework has considerations about what the individual already knows rather than what he or she does not know. A psychosocial competence theory has garnered significant application in the delivery and planning of interventions, thus, it is most suitable for the present study (Gates, 2007; Zins, Weissberg, Wang, & Walberg, 2004). Its theory is inclusive of a set of behaviour attributes that promote effective functioning that focuses on actual or potential strengths, natural helping networks, and life experiences as the major instruments of interventions (Tyler, 2002). Within this framework, it is assumed that the skills an individual possesses give him/her an active stance of personal control or responsibility, as well as a realistic but optimistic level of interpersonal trust in relating to the world. More importantly, this framework gives an active coping orientation toward life's problems, as those faced by children with LDs (Tyler, 1978).

Psychosocial competence practice emphasizes concepts of independence, which is suitable for students in mainstream classrooms preparing for a transformed education system that requires independent learning. As recipients of a competence-centered approach, students with LD learn self-management, meaningful connections, and reliance on community supports (Tyler, 2002).

Jones (2004) has defined psychosocial competence practice as having locus of control, coping, and self-efficacy, which represents an innovative paradigm that is

consistent with newer conceptions used in work with children. These characteristics do not equate well-being with absence to pathology, but rather well-being as reflecting the presence of skills, competencies, knowledge, and qualities that enable a person to interact and function effectively in his or her environment (Maluccio, Washitz, & Libassi, 1999).

Children with LDs should know that although they may have weaknesses in certain areas, there are many characteristics they possess that make them holistic beings with strengths as well; these characteristics may be innate or acquired. In either case, as already mentioned, children themselves are in control of the characteristics they possess; thus, if utilized appropriately, children with LD can be independent, self-reliant, and confident students, with the ability to navigate their learning environment successfully (Tyler, 2002).

## Review of the Literature

### Learning Styles

According to Rochford (2003), learning style refers to the way one concentrates on, processes, internalizes, and recalls new and difficult information. Also maintained is that, for the non-learning disabled populations, their style of learning is flexible; thus, shifting from an auditory to a visual learning mode is not difficult. For individuals with an LD however, use of more rigid learning styles inevitably results in academic difficulties when in a mainstream education system. This is because; children with LD are not able to shift easily from one learning mode to another.

Because a particular mode of learning for a student with an LD is their own unique and preferred style, he or she will inevitably struggle in subjects that do not allow for its use (Blackmann & Goldsteind, 1982). Following, are the learning styles most frequently used among students with LDs, since particular styles of learning are often associated with specific LDs, such as, reading, mathematics, nonverbal, written and language expression, auditory processing, and LD/ADHD, they are described as exclusive categories in the subsequent sections.

### Reading Disabilities

The federal definition of reading disorder identifies two areas of reading disabilities: basic word-level recognition and reading comprehension. Dyslexia is an example of a word-level recognition reading disability. It is the most common form of LD and occurs in degrees along a continuum of reading ability. Reflecting persistent

deficits in linguistic and reading skills, dyslexia and reading disabilities affect varying areas in a student's academic performance (Poole, 2003; Reid & Weatherly Valle, 2004). Research tells us that students with dyslexia have difficulty decoding words, sentences or paragraphs, and reading single words (Olson, Forsberg, Wise, & Rack, 1994; Perfetti, 1985; Shaywitz, 1996).

According to Bayliss and Livesey (1985), children with reading disabilities adopt a different type of learning style than their non-learning disabled peers. That is, children with LD take-in information in a way that makes sense to them before processing occurs, rather than trying to make sense of the information after processing. Dysphonetic versus dyseidetic readers for example, process information in two distinct ways. Children defined by the former, use a holistic learning style, recognizing words as wholes. Children defined by the latter, use an analytic learning style, memorizing the sequential order of elements in a word (Bayliss & Livesey, 1985).

Stoiber, Bracken, and Gissal (1983) assert that successive/sequential processing occurs when tasks involve the temporal ordering of stimuli. When students use this particular learning style it is the responsibility of the teacher to recognize that it differs from the style used by other students in the classroom. Thus, based on knowledge of learning styles, teachers become more effective when they are aware of them and teach so that all students can understand their instructions (Stoiber, Bracken, & Gissal, 1983).

## Mathematics Disabilities

Like reading disabilities, mathematics disabilities have varying definitions. Lyon, Fletcher, and Barnes (2003) refer to the federal definition of LDs, which state it to be disabilities in mathematical calculations and concepts. While the National Joint Committee on Learning Disabilities define LD as significant difficulties in math, the DSM -IV-TR (American Psychiatric Association, 2000) refers to deficits in math as "mathematics disorder" and provides a number of criteria to use in the diagnostic process.

Research tells us that when students with LD are taught, they prefer oral explanations or visual learning methods and face challenges with mathematics when taught otherwise (Boekaerts, 1999). Problem-solving questions that involve large amounts of wording are present in many textbooks after the typical grade (grade 3) of LD diagnosis, thus children with mathematical disabilities have difficulty with these types questions. This may be because problem-solving questions only offer students the auditory experience of the problem, without the visual or tactile experience. In fact, studies by Boekaerts (1999) and Wadlington and Wadlington (2008) show that oral or visual presentation is the most effective method to teach children who have disabilities in mathematics.

Geary (2000) subdivides mathematics disabilities into three categories: semantic memory, difficulty retrieving arithmetic facts; procedural memory, understanding and applying mathematic procedures; and visuospatial memory, difficulty understanding spatially represented numerical information. The way a child tackles these difficulties depends on his or her learning style, that is, whether it is a quantitative or qualitative

learning style. For students who use a quantitative style, language skills and concepts are usually not a problem, these are in fact one of their strengths. These learners are sequentially oriented and prefer to take problems apart to solve each piece separately and then reassemble them. Qualitative learners have an approach that is intuitive, with a focus on the visual-spatial aspects of mathematics. This learning style is whole-to-part oriented where learning takes place through the perceiving of patterns and relationships (Sharma, 1990). Academic difficulties for students with mathematic disabilities lie in the relationship between the two learning styles; that is, qualitative and quantitative learning. Thus, an integration of both approaches is required in order for a child with LD in mathematics to become successful in this subject area (Wadlington & Wadlington, 2008).

#### Nonverbal Learning Disabilities

Rourke (1989, 1995) defines individuals with nonverbal learning disabilities (NVLD) as having a characteristic pattern of neuropsychological assets and deficits that give rise to a specific pattern of strengths and weaknesses on measures of intellectual, academic, neuropsychological, and socioemotional functioning. Children with NVLD present with strong verbal intelligence and weak visuospatial abilities, as well as with a learning style predicated on their proficient phonological and rote memory. Individuals with NVLD may experience extreme difficulty adapting to novel and complex situations, and are characterized by emotional features such as depression and anxiety. For these reasons, children with NVLD learn best when they are positively reinforced and are encouraged consistently (Rourke, 1989).

While children with NVLD tend to have adequate language skills, their nonverbal communication may be drastically impaired in areas such as the pragmatics and semantics of language. For example, in conversation children with NVLD may have a large language output but meaning, organization, and content are lacking. This type of LD greatly influences relationships formed and especially affects the dynamics of those relationships. A child with NVLD must always be reminded of how to act, what appropriate social skills to use in certain contexts, and how to “read” the nuances of their social world (Worling, Humphries, & Tannock, 1999).

The learning style of individuals with NVLD consists of strengths in areas of reading, decoding, spelling, and language (Rourke, Ahmad, Hayman-Abello, & Warriner, 2002). Weaknesses are evident in their hyperactive personality type and the disruptions this hyperactivity may cause, which results in limited learning opportunities (Fuerst, Fisk, & Rourke, 1990). Generally, students with NVLD have a learning style that is interactive. They learn best when they speak to and communicate with their peers. Students with NVLD also prefer an auditory, visual, or tactile learning mode. This is where hearing, seeing, or physically experimenting with tasks result in optimal learning.

In addition to their hyperactive personality type, children with NVLD have increased activity in the Broca’s area of the brain. In fact, research indicates that this increased activity specifically occurs when they are presented with verbal rather than tactile instructions. This research suggests, children with NVLD use explicit verbal information to rehearse the required sequence silently in order to acquire it (Tuller, Jantzen, Olvera, Steiberg, & Scott-Kelso, 2007).



Periventricular nodular heterotopia (PNH) is a specific NVLD that results in deficits in social, visuospatial, and mathematic skills. These are common deficits found among individuals with NVLD; slow processing speed in particular, is the main deficit in individuals with PNH (McCann, Pongonis, Golomb, Edwards-Brown, Christensen, & Sokol, 2008). Due to the clumsiness, motor delay, and poor social skills in children with PNH, learning takes place in ways similar to their non-NVLD peers but in a significantly slower manner. Thus, students with PNH may require more time and patience when taught in public school settings.

Russell-Silver Syndrome (RSS) is a rare genetic developmental disorder with characteristics that also define it as an NVLD. Individuals diagnosed with the disorder have pre- and post-natal growth delays as well as physical abnormalities. They present with an academic profile consistent with NVLD with deficiencies in motor planning, mathematics, writing fluency, and social behaviour, such as attention and concentration. Students with RSS face a ruminative cognitive-emotional style, where they spend large amounts of time thinking and rethinking information presented to them. Because of these characteristics, it is suggested that children with RSS require counselling to address their emotional issues, and also require neurological assessment for their weak patterns of cognitive processing (Plotts & Livermore, 2007).

Other examples of genetic disorders associated with features of NVLD include Turner's Syndrome, Williams Syndrome, and Sotos Syndrome, for further reading on these syndromes see Rourke (1995).

## Disabilities of Written and Language Expression

Students, who have LDs specifically in the area of writing, often have difficulty demonstrating their conceptual knowledge. Since mainstream public schools require students to write to communicate competence in most subject areas, they often find themselves struggling with various aspects of writing. Typical struggles include generating content, creating and organizing structure, formulating goals, effectively executing the mechanical aspects of writing, and revising (Scardamalia & Bereiter, 1986). Students with disabilities in writing do not plan when they write and have a visual or spatial memory, thus when information comes to their mind, they write impulsively, without given much thought to the style or content (Graham, 1990).

For students with disabilities in written expression, problems may arise when they have to store information in their working memory. Klein (2003) specifies that the number of elements in the working memory of students with disabilities in written expression should ideally be between two and four. This limited number, allows students to perform using only one learning mode, such as, visual only or verbal only. Furthermore, research shows that students with this disability learn through visual cues, thus they write with representations of their thoughts. This may result in a misrepresentation of words, phrases, and sentences that they would like to express. In the course of their learning and thinking, children with disabilities in written expression actively create and modify representations; they inadvertently change the way they engage in tasks because of how writing is represented to them (Cox, 1999; Norman, 1993; Zhang, 1997).

In 1998, Nam and Oxford conducted a case study about the learning style of an individual with a language related LD. The subject's learning style for language, reading, and writing ability was dependent on her ability to conceive spoken word as a sequence of phonemic (sound uttered) segments, and the capacity to remember these segments in words and syllables. The study rendered this type of learning, extraverted since the learner preferred to work in groups and learn through socializing and visualizing. This study shows that a student may possess a wide range of social interactions when learning language. Furthermore, for students with disabilities in language expression, there is a preference for a learning style that is concrete-sequential. This learning style is characterized by a systematic structure, with details broken down for the student (Nam & Oxford, 1998).

#### Auditory Processing

Children with auditory processing disorder (APD) do not effectively use auditory information. They misunderstand complex and lengthy directions, show a variety of academic difficulties, and behave as if they have problems with their hearing (Katz & Smith, 1991). A particular form of APD, called "rapid auditory processing", describes children's inability to process sound that occurs rapidly or briefly in time. This means, children receive a "fuzzy" representation of speech sounds in the brain (Tallal, 1980). In addition, they have difficulty associating corresponding print letter with actual letter sound. Thus, an unstable phoneme representation interferes with their ability to map sound onto letters.

Children with APD use learning styles that results in incoming sounds being blocked or filtered out before being processed, this is referred to as a neural resistance to noise (Russo, Nicol, Zecker, Hayes, & Kraus, 2005). Abnormalities in the brainstem and in the speech syllables heard result in processing of verbal stimuli at the cortical level, which differs from children without APD (Wibble, Nicol, & Kraus, 2005). The outcome is, development of a right-hemisphere dominance for speech consonants and learning through compensatory activation (VeUILlet, Magnan, Ecalle, Thai-Van, & Collet, 2007).

Due to the many distractions that occur within one's environment, children with APD prefer a learning style that is visual. Research shows that when pictorial, 3D, or live representations are not available to children with APD, communication through written expression is most effective. This sort of communication allows children with APD to process information at their own pace (VeUILlet, Magnan, Ecalle, Thai-Van, & Collet, 2007).

#### Attention-Deficit/Hyperactivity Disorder

Attention deficit/hyperactivity disorder (AD/HD) is characterized by inattention or hyperactivity and impulsivity DSM-IV-TR (American Psychiatric Association, 1994). Children who present with the disorder may have difficulty sustaining their attention or attending to detail, remembering rules, or following through on rules. They are not able to remain seated for long periods or when required, they are excessive talkers, and interrupt others due to their impulsivity. Barkley (2003) also describes ADHD as a developmental disorder that often co-occurs with LDs. It is for this reason that children with LD and ADHD have been included in the present study.

Students who have an LD and ADHD may be affected by the working memory deficits of ADHD. This deficit results in an inability to maintain or hold information in memory for use at a future event. Thus, impairment results in forgetfulness, poor time management, and little forethought and hindsight (Barkley, 2003). Indeed, students with ADHD can learn; however, consideration of how much information is presented at one time, and the amount of time for which this information is required, is imperative to their academic success.

Children with ADHD may present with a poor ability to internalize and self-regulate emotions (Keenam, 2000). They may also have deficits in motor control and fluency, which becomes evident in their fine and gross motor skills (Kadesjo & Gillberg, 2001). Consequently, due to the visible deficits, children with LD and ADHD experience extreme difficulties in social/school environments (Whalen & Henker, 1992).

#### Summary Thoughts on Learning Styles

Children with LDs are all different. The learning styles they possess typically depend on the type of LD they have. The learning style is a unique characteristic that is akin to a personality trait, it is inherent within individuals and is a part of who they are (Reid & Weatherly Valle, 2004). Since one's personality cannot be altered, each child should benefit from opportunities to manifest their learning through it; otherwise, they are being deprived of inclusive learning opportunities to which they are entitled (Slee & Allan, 2001). In addition, teachers who are aware of the various learning styles that students with LD possess are better able to help and guide students to realize their

strengths, subsequently reaching optimal potential within and outside of the academics (Marston, 2005).

Acceptance of various learning styles allows students to use different modes of learning to acquire information without feeling inadequate. Although in a classroom a teacher may instruct several students with LDs, each student may fall under different categories, such as, reading, mathematics, nonverbal, written or language expression, auditory, or LD with ADHD. As demonstrated in this section on learning styles, there are distinct LDs with distinct characteristics. Therefore, what may work or be feasible for one student may not be for another. Awareness of this fact is essential when teaching in classrooms that strive to include all children.

#### Things the Child Likes To Do

Children with LD, like all other children, may have extracurricular interests. These are pursuits the child has interests in and are likely carried out in his/her recreational time. This particular facet of a child's interests may be characterized as one of his/her strengths, specifically because it is likely something the child is also good at. Whether it is soccer, art, creative writing, gymnastics, or talking, if fostered, these interests may become the foundation for success in related fields, for example: soccer, painting, poetry, Olympics, or talk-shows. Thus, it is up to individuals who work with children with LD to recognize these characteristics, so that the child is encouraged to follow their interests and build upon these strengths.

If for example, a teacher makes it clear to a child that his/her hobbies may be transferred to the classroom, that child will develop a natural desire to learn using his/her interests. This may mean that if the child's interest could be incorporated in his/her learning he/she may begin to explore other areas that relate to the initial area of interest. For example, from an interest in gymnastics a child may develop further interests in geometry or physics, while that child may have initially had problems learning mathematics or visuospatial skills.

### Coping Strategies

The literature shows that children with LD are emotionally affected by the disorder. Therefore, it is essential for them to have coping strategies that help them to alleviate, in a healthy way, some of the emotional effects associated with the disorder.

### Coping with failure

Cullen (1985) shows that children with LD have different options when dealing with academic failure; for instance, they can cope by using either action-oriented or strategy-oriented patterns. This means children can use appropriate strategies for monitoring and correcting their academic failure or can seek help or persist on the task independently. When they are resourceful and use these types of coping strategies, children with LD realize their internal attributes and are likely to feel a sense of pride in their accomplishments rather than a sense of failure.

### Coping in a classroom

There are many types of coping. The way a child copes with an LD may change from one situation to the next or may change when the child is dealing with a particular affect of LD. This change therefore requires different types of coping mechanisms, ones such as problem-focused or emotion-focused coping. Lazarus and Folkman (1984) define problem-focused coping as involving actions designed to alter a situation to make it less stressful. On the other hand, emotion-focused coping involves the use of cognitive or behavioural strategies to help the individual manage distress produced by a problematic situation.

Both the above coping mechanisms are particularly helpful for children with LDs and ADHD. For example, in problem-focused coping, a child may leave a classroom that is too noisy to focus on his/her schoolwork in order to cope with the stress that noise may cause; this may lead to positive outcomes over a period. Alternatively, a child may squeeze a stress ball to relieve tension evoked from being in a noisy classroom, these situations that are out of the control of the child, may be more adaptive in the long run.

### Summary thoughts on coping

The theoretical literature on coping is remarkably consistent, despite the variations in terminology. Generally, positive coping is considered flexibility in the use of different coping strategies that are appropriate for specific situations. Therefore, no single type of coping strategy is optimal in every situation.

## Current Challenges: Different Views about LD

### Teachers' views about LD

Researchers have shown that teachers are faced with challenges when teaching in a classroom comprised of students with various LDs (DeSimone & Parmar, 2006; Dockrell, Lindsay, Letchford, & Mackie, 2006; Forrest, 2003; & Harlin, 2008). These researchers show that, due to the challenges that teachers face, teachers are not effectively instructing students with LD. The challenges are therefore an indication that there is a lack of knowledge about the available strategies for use in mainstream classrooms.

In 2007, Snider and Roehl evaluated teachers' views about pedagogy, they found that teachers are aware that children possess different learning styles; however, these learning styles are not always clear. Unfortunately, this leads to teachers not being able to modify instructions or individualize lessons to target all their students. Accordingly, Snider and Roehl (2007) suggests that, due to the individuality that students bring to the classroom, an eclectic environment is most conducive to each child's learning needs. Unfortunately, this is not the case in all Canadian classrooms today.

### Parents' view and cultural views about LDs

Most parents tend to observe the positive characteristics in their children before the negative. This means, whether or not their child has an LD, the strengths outweigh the weaknesses in a parent's eyes, as eloquently put by Chupik and Wright (2006). These researchers make it clear that, as far back as the early 20<sup>th</sup> century most parents viewed

the individual before the disability, and in some cases view the disability as merely a construct/label that is unrelated to the child. The views that parents hold may conflict with the views of others, such as professionals who may view LDs as only a weakness.

In their review, Chupik and Wright (2006) show that in the early 20<sup>th</sup> century, families in Ontario conceptualized "mental-deficiency" as a curable and treatable condition. Similarly, Chang and Hsu (2006) show that, in the Taiwanese culture, parents view LD as something that is treatable in children. It is made clear that, Taiwanese parents believe that a disability arises due to a lack of harmony in the home. Therefore, if each member within the family, including deceased ancestors, is in harmony with one another, together they can accomplish anything, including overcoming a disability. Furthermore, a professional is not the individual to help the child cope, but rather the family unit, whom prosper together (Chang & Hsu, p. 2350).

Alternatively, in Chinese culture, parents believe an LD is a reflection of a lack of self-discipline that exists because not enough strictness and parental discipline was provided to the child. The held belief in Chinese culture is that mainstream public schools reinforce LD by providing too little homework, little training in math, and no moral education for children (Tews & Merali, 2008).

The existing literature on the views parents have about LD makes it clear that views differ from one culture to another, as well as within cultures, from one parent to the next. Therefore, the construct of LD may or may not exist and is dependent upon who perceives it. In Canadian education systems, which service families from diverse backgrounds, educators ought to be aware that varying views exist about LD. In fact,

more research is needed in the area of culture and experience of LD in public schools, particularly in Canadian contexts.

#### Children's views about LD

Researchers such as Klassen and Lynch (2007) and Nowicki (2007) found that children without LD believe that the disability is a temporary academic difficulty, which the effected individual can control. They believe it can change over time and that LD is overcome if the individual applies more effort. Radcliffe (2007) found that children with LD have negative perceptions about LD in relation to themselves. His study suggests there is a need for awareness of the possible distressed experiences of children identified with LD. Therefore, it is clear that research needs to fill the gaps in literature regarding the awareness of the emotional and mental health needs of children with LD, which are pertinent to their success (Brazil, Cummings, Vallance, 1993).

#### Mainstream Public Schools

Unfortunately, in a mainstream classroom, for children who learn differently than their "typical" learning counterparts, academic difficulties may be inevitable. This may be because mainstream public schools tend to have an attachment to certain favoured modes of learning, such as, auditory (Nam & Oxford, 1998). If for instance a child has a tactile learning style and an LD in auditory processing, he or she may be lead down the path of repeated failures and learned helplessness if not provided the opportunity to learn in their preferred mode (Blackman & Goldstein, 1982).

When a child is not given the opportunity to learn in their preferred mode, the child is very likely to encounter difficulties. Teachers are often limited in their ability to individualize instructions so that each student in the classroom is targeted (Yong & McIntyre, 2001). Research shows that the following researchers, whom created these approaches, are the only individuals that tested the interventions: Alty, Al-Sharrah, and Beacham, (2006); Bayliss and Livesey (1985); Mann (2006); Siegel (1999); Wadlington and Wadlington (2008). The problem with this is that researchers/professionals may hold a different view and expectation about the outcomes of interventions, than parents/teachers. Thus, if a teacher or parent attempts to implement an intervention or teaching strategy with a child with LD, it may yield different results than if a professional implemented it.

#### The Traditional/Conventional/Deficit Model

Traditionally, negative indicators of deficits in children with LD were central in the identification of the LD. These deficits are useful in determining which students require an intervention and what to focus on in that intervention. They fail however, to determine variables that positively determine the students' academic outcome and potential success (Edwards, Mumford, & Serra-Roldan 2007). What dominates in the assessment of LD is pathology (deficits). Pathology shapes research, policy, and practice. It in turn fuels the creation of elaborate and expensive service and program delivery infrastructures, which creates a dependence on professional experts. This dependence may eventually reduce the amount of independence of affected individuals (Clary & Reohlkepartain, 2004). Furthermore, pathology and deficits encourages a culture of fear,

consequence, and derogate; these ignore and interfere with the natural and inherent capacity of individuals to develop naturally without restrictions or hindrance (Rhodes, 2002).

Paradigms based on traditional methods of assessing and teaching students with LD use a medical model to help children cope. These paradigms have an emphasis on the diagnosis, symptoms, and treatment of LD, which unfortunately lead to the assumption that, the affected individual has an “illness” that can be treated with external methods. Meanwhile, internal and interpersonal methods have been shown to be one of the most powerful intervention strategies used with youth and children to treat most of the problems they face (Brendtro & du Troit, 2005).

### The Strength-Based Model

#### How is a Strength-Based Approach Conceptualized?

The key focus of a strength-based approach is the positive characteristics that individuals embody. The literature on strength-based approach conceptualizes it as encompassing positive “building blocks” that all children require for success (Benson, 1997). The goal of the approach is to foster development to allow opportunities for children to reach their full potential. Furthermore, an important framework elicited from this approach is one that focuses on individual strengths. Thus, strength-based approaches emphasize that, although individuals may have weaknesses, they certainly have strengths as well. Recognized as assets, these strengths are used as sources of support and power, particularly when coping with a disability (Huebner et al., 2003).

Children with LDs are typically of average or above average intelligence and have difficulty in one or several academic domain(s) (Nind, 2008; Lyon, Fletcher, & Barnes, 2003; Reid & Weatherly Valle, 2004). They may exhibit a learning style that indicates an activity/physical mode of learning and prefer to acquire through observation, manipulation, and experimentation. Thus, strengths for tasks with a visual/performance orientation should suggest to teachers that they ought to capitalize these strengths. Capitalizing on these strengths can be accomplished with instructional strategies that employ visual and “hands on” activities (Marley & Levin, 2007). This does not always happen; so, strength-based models look beyond factors that are out of the control of the student and focuses on internal factors in which the student can control.

Motivational variables such as interests and self-efficacy, are what Long, Monoi, Harper, Knoblauch, and Murphy (2007) deem as variables that positively relate to empowered achievement. Research shows that these variables result in improvement in various academic areas, such as, test scores, grades, and problem solving. Thus, one way in which the literature conceptualizes strength-based approaches is through the motivation they evoke in students. For example, when a student is the recipient of a strength-based intervention, he or she becomes motivated through their improved self-efficacy and independent responsibility of their own actions (Cox, 2006; Long et al., 2007). Predicated on behavioural skills, competencies, and characteristics that create a sense of personal accomplishment, strength-based approaches emphasize positive characteristics in order to promote one’s overall development and reason for motivation (Cox, 2006).

Numerous services, such as, schools and mental health clinics, are beginning to embrace a strength-based approach as a means to prevention, intervention, and/or treatment for child and adolescent problems because it allows children to independently succeed through the use of their own internal skills (Benson, 1997; Cox, 2006; Edwards, Mumford, & Serra-Roldan, 2007). This approach recognizes that even the most distressed youth have unique talents, skills, and resources that foster positive development. Thus, what is established is a general respect for all children (Cox, 2006).

Although general acceptance about the idea of positive youth development is just beginning to emerge, there is still no clarity about how to implement a sound strength-based strategy in a large organization or school. In fact, Huebner and colleagues (2003) state that it is easy to confuse a general philosophy of youth development and positive approach to working with young people, with a vision and plan to implement an actual program. Therefore, it is important that when helping children with an LD, the intervention component of their academic development consist of their own, and educators'/professionals' recognition of the strengths the children themselves possess. Children's recognition of their strengths, allows for learning that is independent; thus preparing them for a transformed education system.

#### Developmental Assets

A developmental assets framework is an approach to development that emphasizes pro-social expectations to determine which variables positively influence the trajectory of students' school-related outcomes. This framework determines which variables are important implications for the development of successful intervention

programs (Edwards, Mumford, & Serra-Roldan, 2007). Furthermore, recognition of developmental assets may lead to improvement in both education and life outcomes. Benson (1997) shows that this recognition benefits children at-risk for development of LD.

In 1997, Benson described the developmental assets that youth possess. His research establishes that, awareness of these internal and external assets is the "building blocks" for positive and healthy development in all children. Specifically, 20 external assets envelop youth with familial and extra-familial networks that provide support. These are empowerment, boundaries, expectations, and constructive use of time. They describe the necessary ingredients in youths' environment for positive development, such as home, school, and community. Twenty internal assets serve to nurture positive commitments, values, identities, and social competencies. These assets illustrate personal qualities that facilitate positive development. Thus, the assets that children possess develop in different ways and the environments they are a part of produce unique interpersonal strengths that differ from child to child (Benson, 2007). For further elaboration on internal and external assets, see Edwards, Mumford, Shillingford, and Serra-Roldan (2007).

Identification of positive assets is crucial for the formation of a holistic view of a child; this is necessary for planning effective intervention programs (Reid, Epstein, Pastor, & Ryser, 2000). Accordingly, children affected by an LD who recognize their own internal sources are more likely to be viewed in a way that results in the best intervention for them. This recognition consequently leads to the best outcome for



academic achievement (Reid et al., 2000). Recognition of the developmental assets of a child indicates to them, their parents, and others, that strengths can define children with LD more positively than weaknesses, potentially increasing self-esteem, self-efficacy, and self-worth (Ogbu, 1997).

#### Summary Thoughts on Strength-Based Models

Strength-based models are conceptualized based on efficacy of promoting positive aspects in individuals. When implementing interventions or when teaching children with LDs, research suggests that educators ought to recognize the positive aspects of all students. Thus, recognition of strengths gives all students opportunities to reach their full potential (Meyer & Rose, 2002). Unique strengths of students with LD may include such things as, a strong visual/artistic skill as observed in children with dyslexia, or an extraordinary capacity to recognize facial expression as observed in children with aphasia (Meyer & Rose, 2002).

If not provided opportunities to exercise their strengths, children with LD do not succeed in overcoming their difficulties and tend to have negative experiences in conventional achievement structures. These negative experiences stem from the traditional teaching methods often used in mainstream public schools. Traditional methods teach students that success comes from external sources only, which are in fact limited and out of their control (Guest, 2007).

## Current Approaches Used for Identifying Children with LD

### Assessment by Teachers

Assessment by teachers for identifying children with LD can have both advantages and disadvantages. When assessing students for LD, teachers are likely to use observation or informal tests, in which they compare students' performance with the standards expected on the tests or with the performance level of students' peers. In this case, students are assessed for LD but the assessment might be subjective and influenced by the teacher's perception of the child. On one hand, this may be disadvantageous, because the teacher's personal biases may be present, and may or may not take account of the child's strengths. Teachers hold expectations for students that are based on the norm of the specific age and grade level for students of a cohort. When a child with an LD does not perform to those standards, he or she may stand out to the teacher as a student who needs extra help to "keep up" without being aware of what other strengths the child may have.

On the other hand, assessments by the teacher can be advantageous, since the teacher can add to what is not accounted for in formal assessments. When teaching a child to read for instance, a teacher may realize that the child appears to be struggling, such as, reading slower than his or her peer does. Following this realization, the teacher would then refer that struggling reader for a formal diagnosis (Grigorenko, 2001; Rayner, Foorman, Perfetti, Pesetsky, & Seidenberg, 2002).

A study by Marston (2005) tells us that teachers ought to have a comprehensive evaluation based on relevant data about needs and strengths of a student when assessing a child. Thus, when both sets of variables are considered it may yield better results for individualized interventions in the classroom, which are directed toward children with LD. The literature on assessment by teachers denotes little about teachers' formal role in the process. This means that the strengths that students may display in the classroom are not necessarily accounted for once they have been referred to an outside individual, who may not see these strengths. Teachers are often not able to do such a comprehensive evaluation and are likely to not identify the children's unique strengths but rather focus on their weaknesses.

#### Assessment by Professionals

Professionals are more likely to use formal assessment methods, such as IQ and other standardized tests, when identifying LD in children. Diagnosis of LD can be heavily based on the outcome of IQ testing. If this is in discrepancy with achievement and is more than two standard deviations below the mean, a child could be diagnosed with an LD (DSM –IV-TR, American Psychiatric Association, 2000). This sort of assessment however, fails to account for abilities the child may possess in areas not formally tested, such as creativity or kinaesthetic abilities (Hammill, 1993).

In 2006, Chupik and Wright completed a clinical file review of youths with LDs. Their review concludes that in the 20<sup>th</sup> century, professionals conceptualized LD as a condition based only on the weaknesses of children. During the assessment process, a lengthy 50-question "history form" pertaining to the child's habits, ability to walk or talk,

and prior education level, was completed by parents before any intervention was put into place. Conclusions indicate that, similar to IQ tests used today, during professional assessments, children are compared to their "typical" counterparts, despite the fact that strengths may be a significant distinguishing factor. For instance, in the early 20<sup>th</sup> century, children with LD only needed to demonstrate that they did not meet the "typical" standard to warrant an LD diagnosis. While some tests such as the IQ test give a profile of the child's strengths and weaknesses, the strengths are not always used in developing a program for the child.

For a child with strengths in areas not tested during a formal assessment, he or she may not be provided the opportunity to express those strengths. The "history-form" that Chupik and Wright (2006) refer to in their file review, provided crucial documents used in the process of admission, and was incorporated into the institution's discourse surrounding the child's treatment intervention. This lack of recognition for the child's strengths may be compared to documents that parents receive following an LD diagnosis at the child's school. For example, unless modified regularly, documents such as those produced by Identification Placement and Review Committees (IPRCs) may not include details about the child's strengths and accomplishments (Ontario Ministry of Education, 2007).

#### Assessment by Parents

While we cannot claim that parents conduct official assessments with their children, they are in the best position to observe what their children's capabilities are. Many would agree that parents are typically the individuals who interact with their child

the most. When a child spends most of their time at home with the parent, there is opportunity for him or her to exhibit characteristics that are not traditionally measured in the academic setting. Children may perform one way in front of their parents and they may perform another way in front of teachers or professionals, thus parents' views should be accounted for in the process of identifying children with LD.

Parents often question their child's academic struggles when tests are sent home with scores that are significantly below what they believe their child is capable of achieving. They also question reports of social problems that he or she may have encountered throughout the day (Anonymous, personal communication, June 2009). The existing literature does not indicate how parents' views are taken into account when assessing for LDs in children.

Within the public school setting, IPRC use in the identification of LD is the context in which parents' views may be accounted for. The process involves a written request from a student's parent(s) (or legal guardian) and a principal. The principal then uses the request to make the decision as to whether or not that student should be assessed for exceptionality. He or she also decides what kind of educational placement is most appropriate for that student. This decision however, does not account for what the child is able to bring to the educational placement, which may benefit teachers, peers, and the child him/herself (Ontario Ministry of Education, 2007).

Despite many barriers, parents of the early 20<sup>th</sup> century did not view disabilities in as fatalistic a manner as professionals and teachers did. Thus, parents were able to see the strengths their child possessed and used them to teach or intervene in areas where their

child had deficits. This indicates that, once parents become aware of LD and their child's strengths, it is possible to "utilize an array of pre-existing community strategies for treatment and care at home (Chupik & Wright, p. 88)", as the parents did from the reviewed files by Chupik and Wright (2006).

#### Summary Thoughts on Assessments

While evidence does not directly indicate that assessments fail to report on strengths, it does clearly show that they define the child with a deficit that ought to be "fixed". Some tests for LD do identify strengths and weaknesses, such as IQ tests, but the majority focus primarily on the weakness. A strength-based assessment on the other hand would focus primarily on the child's strengths.

In a strength-based assessment, views about LD are not derived from the stance of a medical model, which means, there is no emphasis on deficits to detract from the child's strengths. The child becomes aware of their strengths and positive personality characteristics because at the same time that he/she is being assessed for an LD, he/she is also being assessed for strengths, that is, valuable characteristics that can be used in the real world. Such characteristics include those mentioned in the literature review, like learning styles, coping strategies, and things the child likes to do.

A strength-based assessment is exemplified in the case of a child who has an LD and ADHD. During the assessment, rather than discourse about the child's impulsivity, fidgeting, and lack of sustained attention, these terms may be replaced with, imaginative/creative, loves to explore, selectively attentive, and not afraid to take risks.

When highlighting these characteristics, the child, the parent, and the professional begins to see the child as unique rather than disabled.

Parents see their child for the holistic individual that he or she is, that is, an individual that embodies characteristics that are both negative, and positive. They see an LD as something extraneous to the child, and so are able to define the child separate from the LD. Unfortunately discrepancies may arise when a parent presents their child's LD to a professional or teacher who may only view that child's deficit. The child may then begin to wonder how he/she ought to define him/herself, such as, in the light of the parent or in the light of the professional, who unfortunately may define LDs as a "handicapping condition". Consequently the child begins to lose confidence, self-efficacy, and self-esteem (Anonymous, personal communication, June 2009), what can be done at this point?

## Methodology

### Research Design

The methodology chosen for this study was a qualitative design, which elicited the perspective of the children and parents participating in a strength-based program. The study aimed to attain participants' views on the way in which a strength-based program helps children to cope with an LD. This study is therefore qualitative in nature. It analyzed the views, perceptions, and experiences of children and parents in the Learning Disabilities Association of York Region strength-based program, and sought to identify themes in their responses. The research design used taps into the voices of participants, which is not likely to occur in a quantitative study (Neuman, 2006). The focus of the study is on gaining participants' perspective on a strength-based program and comparing their experience to what the literature says about the experience of children in traditional LD and strength-based programs.

In addition, in utilizing a semi-structured interview approach to obtain the experiences of recipients of the LDAYR program, the present study falls in line with what Creswell (2008) describes as qualitative research. That is, participants were given an opportunity to be heard, participants answered general open-ended questions in an environment familiar to them; and the researcher recognized them as individuals. This method therefore validated participants' views, so that they may become advocates for themselves (Creswell, 2008, p.51).

Given the opportunity to create their own knowledge, participants answered open-ended interview questions to make sense of their own social reality. Hale (1995) suggests that this is a constructivist view that creates a relationship between what is already known and the knowledge that exists within participants. Therefore, the type of social knowledge acquired in the present study is subjective and flexible. It does not convert the social reality of participants into objective numbers and variables, as would be the case in quantitative methods. Rather, knowledge was constructed based on the unique social context of each participant, in relation to both the literature and the researcher (Neuman, 2006).

The use of an interview method for qualitative research gives the researcher the advantage of controlling the sequence of questions posed. In addition, from information seeking probes and nonverbal communication cues of participants, the researcher is able to evaluate and create "rich" data. In this study, the advantages of an interview method outweighed the disadvantages, such as inconvenience and interviewer bias (Neuman, 2006, p. 301). With sufficient knowledge on this method, the researcher controlled and accommodated for both disadvantages. The richness of responses gained from interviews allowed for evaluative-worthy data that could be analyzed for common themes among recipients of the LDAYR program.

#### Alternative Designs

A quantitative research method using comparison groups that can measure participants' academic progress or lack of progress over time would be a suitable design for this study. In demonstrating true efficacy of a strength-based model in helping

children with an LD, this method would show the trends in the academic development of participants. With this method, the researcher would test a hypothesis that is non-subjective in evaluating program outcomes (Neuman, 2006). However, due to the time constraint of the present study, use of this method was not possible. Alternatively, a comparative research method may have been used to determine which model better helps children cope with an LD; that is, a strength-based or a deficit-based model. Neuman (2006) states that a comparative research method would improve the measurement and conceptualization of strength-based models. In this method, the two models would be rendered distinct interventions, thus making the comparison easier for parents and teachers. This would help them to decide which model would be most effective in helping children cope with LD. In addition, gaining permission to work with children in the public school board and gaining access to data such as achievement and IQ tests were obstacles that made comparative research method impossible for use in the current study.

#### Participants

Three mothers, one father, and their children participated in the study. Parents were of varying age, ethnic, social, and academic background. Parents were either members of the LDAYR parent support group and had a child in the program or were not members of the parent support group and only had a child in the program.

Children in the study were of the parent participants. They were boys between the ages of 9-12 years old and were all recipients of the LDAYR, thus receiving services from the "Social Skills" program. The daughter (girl1) of the father-participant was a recipient of the "ABCs 123s" program but not a member of "Social Skills", she chose not

to be interviewed; thus, her father spoke about her experience in the program. Children were either diagnosed with an LD or deemed “at risk” of developing an LD, and had ADHD. Table 1 shows the specific characteristics of each child involved in the study.

As mentioned in the introduction, this study excluded children with sensory handicaps, i.e., blindness or deafness, as well as children with mental retardation or other developmental disorders, such as, autism. Since many children diagnosed with LD have behavioural problems that often co-occur with the disorder (Barkley, 2003), the study did include children who have a dual diagnosis of an LD and ADHD.

#### Recruitment

#### Procedure

Initially, the researcher’s intent was to recruit all participants from the parent support meetings held in a boardroom at the LDAYR establishment. For a duration of three months, the researcher attended two parent meetings per month, one in the morning and the other in the evening, where the number of members ranged from 5-15 parents. The researcher sat in each meeting and passively listened to parent discussions about the issues they experience with LD. In the middle of each three-hour meeting, the program coordinator introduced the researcher to the group. Following the introduction the researcher further explained to the group who she was, name and affiliation; what she is doing, research project to complete her masters of arts in Early Childhood Studies; who the target volunteer participants were, parents and children receiving any of the LDAYR services; and what involvement in the study would entail, brief 15-minute interviews. After listening to the intent of the researcher, parents decided if they wanted to volunteer

to be a participant in the study. They reflected interest by approaching the researcher with their contact information to schedule a time to complete the interview, while, some parents stayed after the support group to complete the interview immediately following the meeting.

One parent and her son were not able to schedule a time to meet with the researcher at the LDAYR establishment. Therefore, they completed the interviews over the telephone and met with the researcher later to sign the consent and assent forms at a local ice cream parlour near their place of residence. Although the LDAYR was the preferred location for preservation of anonymity, prevention of social “outing”, and neutrality, this particular parent was not available to meet at its establishment. Thus, in choosing still to complete the interview so that her and her son’s voice would not be excluded from the research, the researcher complied with this parent’s requests and completed both these interviews over the telephone to allow the opportunity to be involved.

Upon recruiting only six participants from the parent support meetings, the researcher attempted to acquire more participants by posting the same information relayed during her introduction at the support meeting onto a poster at the LDAYR establishment. This poster also had the researcher’s contact information so that interested parents could voluntarily contact her if they wanted to participate in the study. The one participant gained from the poster method, scheduled a time to meet with the researcher at the LDAYR establishment, and conducted a face-to-face interview.

Although the criteria in the poster asked for children with LD, it turned out that all the children interviewed were diagnosed with both an LD/risk for developing an LD *and* ADHD. This discovery of course shifted the criteria to include the condition of ADHD; thus, probe questions were required to gain information on how behavioural/social problems impact on the experience of recipients of the LDAYR program. The researcher was required to contact the first four participants and schedule meetings to speak with both the parent and child again. She posed questions about how the behavioural/social aspects of LD/ADHD influence their experiences in the strength-based program. Most participants were generous with their time and were understanding of the researcher, who was apologetic about having to re-call.

#### Sample Selection

The present study used a voluntary sample of participants. Since, the matter of discussion during interviews regarded children's mental health problems, the researcher found it appropriate to target only those individuals who felt comfortable to speak about the matter at hand. By attending parent support meetings, parents who were interested in being a participant in the study, and who met the criteria requested by the researcher during her introduction, met with the researcher after or before meetings to complete interviews privately. At the end of the interview, the researcher asked parents if their child with LD might also be a participant in the study. All parents agreed to have their child participate, and so the researcher asked each child if proceeding with the interview would be okay, all but one child agreed.

#### Ethics Review

For this study, the researcher made changes to the initial ethics review application. Changes occurred following the realization that all children had a dual diagnosis of LD and ADHD, and upon discovery that gaining the intended recruitment numbers by only attending the parent support groups would not be possible. The ethic review committee granted the researcher approval for both changes to the study. This approval allowed for display of the recruitment poster in the LDAYR establishment, and for the addition of four supplementary open-ended questions to the interview for both parents and children.

## Potential Contributions and Benefits of the Study

### Benefits to Participants

Participants may benefit socially or emotionally from the chance to speak about LD with an individual who does not directly work with the child. The effects of LD affect a child's life as well as those with whom he or she interacts. Thus, when asked to reflect/comment on their child's experience in the public school system, parents tended to express concerns about the impact that the school has on their child's ability to cope with an LD.

Another benefit to participants is, since the study collected and produced knowledge through a constructivist paradigm, participant involvement resulted in newly acquired knowledge about LD and strength-based models.

### Contributions to the Canadian Education System

This study has the potential of contributing to the strategies for teaching children with LD in mainstream public schools. Classrooms in Canadian societies consist of children from varying backgrounds. Whether it is academic/cognitive, cultural, social, or behavioural, diversity requires an openness to inclusive education so that no student is excluded from learning opportunities (Slee & Allan, 2001).

As indicated in the above literature review, Canadian public schools have limited approaches in what they offer children with LD. The ones traditionally used, unfortunately may cause damage to self-esteem and self-efficacy, rendering recipients overly dependent on external sources for their own success. The views of parent

participants in the present study provided examples of this dependence. In introducing a strength-based approach into public schools, children with LDs are more likely to become self-reliant, independent, and prepared for a transformed education system (Ada & Campoy, 2004).



## Data Collection

### Interviews

At the beginning of the interview meetings, the researcher presented parents with consent forms. These forms contained information that was also verbalized prior to their agreement to participate in the study. Consent forms presented it in a more formal manner and on hardcopy. They had two sections for signatures, one for the interview process, expectations, rights as a participant, and the study's intent, the other section was for agreement to be audio-taped throughout the interview.

For children, the researcher used an assent form, since all children were under the legal age to sign consent forms. After the researcher explained to children what was taking place, their expectations, and their option to "skip" or not participate if they chose not to, she read the form aloud to them or had children read the form to themselves. Written, using child-friendly language, the assent form contained a condensed version of the information from the parent consent form, but did not have a separate signature/print name section for audio-taping. See appendix B for a sample of consent and assent forms.

All interviews were between 15 and 30 minutes in duration. Face-to-face interviews were held at the LDAYR establishment. These took place in the same boardroom as the parent support meetings after they had adjourned. Since the members typically leave during or immediately following the meetings, it left only the LDAYR program coordinator, the researcher, and the participant in the boardroom. Since only these three individuals were present and there was a familiarity with the environment,

both child and parent participants appeared to be relaxed and spoke sincerely when completing interviews.

Parent interviews involved the researcher recording the interview with a digital tape-recorder and writing responses verbatim from the start of the interview. For child interviews, the researcher also began writing verbatim what children said from the start of the interview, but without tape-recording. Once the researcher posed predetermined questions, respondents answered freely, while some responses were verbose, others were taciturn. The researcher asked probe questions for responses that were brief or that she did not understand. Examples of probe questions included the following: Can you explain? Tell me a little more about that? Please elaborate? While the researcher approached unclear responses with: What do you mean? Can you explain? Do you mean\_\_\_\_\_ (depended on what was unclear)?

The researcher made it clear to participants that their responses would be anonymous quotes in the final write up of the project; she also made it clear that responses could not be traced back to the respondent. Following interviews, the researcher showed her gratitude to respondents by thanking them for volunteering their time and voice to her study, she let them know that their participation was very much appreciated.

## Instruments

### Interview Questionnaire

Interviews were structured and guided by open-ended questions, which the researcher constructed prior to data collection. These questions focussed on eliciting participants' views on strengths, behavioural/social problems faced in the public school, and the LDAYR program. Responses to questions reflected children with LD and their parents' experience in a strength-based program. The questions to parents differed from the ones posed to children. While the questions to parents facilitated discussion about their child in the program, the children's questions facilitated discussion about the experience of the children themselves.

Another goal of interviews was to focus on the behavioural/social aspects of LD to ensure those experiences were also captured. This allowed for all recipients of the LDAYR to be involved in the study, since the program offers services to children with LD and to children with ADHD. Refer to appendix C for a sample of the interview questions used in the study.

### Tape Recorder

The researcher used a digital tape recorder to record all parent interviews. While writing responses as verbatim as possible at the same time as parents spoke, the tape-recorder allowed for future transcription of the interviews. Child interviews were not tape recorded to protect their vulnerability, since they are a special population, that is, children with a disability.

## Data Analysis and Results

The analysis of data collected for this study used an approach designed to manage qualitative data. In this approach, the researcher identified themes after data collection. She began by looking for critical terms, events, and concepts in the participants' responses. Then, she looked for a way to connect each of these to one another; and finally, she extracted the themes observed for data analysis (Strauss & Corbin, 1990). This methodology is similar to a more formal online instrument called Nudist, which is a qualitative data analysis system. Nudist analyzes unstructured data and builds on grounded theory by searching for terms and concepts to code and categorize the data. The researcher did not officially analyze this study's data using Nudist due to the low number of interviews involved. She did however, follow the methodology of this instrument.

## Findings

### Finding 1: Participants' experience in the public school system

Most of the parents and children interviewed for this study, appeared to either have negative experiences in the public school, or did not feel that children's specific problems with LD were directly dealt with by the school. This is evidenced in the following interview excerpts:

*"He doesn't... see his strengths. That's what I think part of the problem is ... it makes me feel bad because he doesn't... see all the good qualities he has..."*

(Parent)"

*"I don't like oral communication. I just don't like it because I get nervous saying things in front of people, because I get nervous and there goes your good mark (Child)"*

*"When the teachers are overwhelmed with problems in the class... .. the general overview of the school not the class. It's the fact that he's having a bad time due to lack of control. (Parent)"*

*"School is supposed to be fun, some people say school is meant for work...they just give you a little time and send you off (Child)"*

*"...you don't want to bother the teachers, that gives them more work than they need, they say. I don't want to bother them, but they are supposed to help... (Child)"*

*"...they're kinda overwhelmed with a lot of kids. His IPRC, they couldn't fit him in June they have to wait until September. (Parent)"*

Finding 2: Participants felt that the LDAYR helped them to recognize children's strengths and personality attributes

The LDAYR helps children to cope with LD by emphasizing children's strengths and children's positive personality attributes. The following interview excerpts demonstrate how the program has helped children realize their positive characteristics:

*"...um they said that he's a good athlete, smart, funny, so you know, a lot... a lot of positive things. And, the thing is he's a very good reader, like he likes to read um...he does have the comprehension... (Parent)"*

*"...this is what I like...I like tests, math tests, social studies tests. I like all types of tests (Child)"*

*"Oh yes, he is extremely intelligent in terms of verbal comprehension, he has an IQ of um, in the 98<sup>th</sup> percentile. He's great with facts and information and can grasp information way above his age. His personality helps him overcome the negatives from school. Like the bullying, being picked on. (Parent)"*

*"Um...probably soccer, football, and... that's it! ...gym and math. I'm really good at math. (Child)"*

Finding 3: Both parents and children were quick to minimize the strengths

Evaluation of child and parent interviews indicates that both children and parents recognize strengths in the child with LD, and were quick to list them. However, they were also quick to minimize or divert from these strengths by speaking about weaknesses or something unrelated to strengths in the same account. For example, when asked, "What are you good at?" or "How would you define your child's strengths?" They would invariably include some negative elements. This is evident in a few of the interviews.

*"A lot of stuff...math, reading... I'm good at math, social studies, science, reading, language power...is listening a skill 'cause I'm not really good at that...because I can't really understand (Child)"*

*"I'm good at ah...science...history...math...Oh like swimming too...skating...I like to interest myself with toys instead of sitting around being bored (Child)"*

*"He's extremely curious, he's very interested in learning everything about the world... he's into math, science, world news... he wants to have lots of companies... he wants to tell the politicians what they're doing wrong...he doesn't know what he's talking about, he's thinking from a child's point of view (Parent)"*

*"...he's doing well in math and social studies and science. But I guess that's all they're covering now in school (Parent)."*

*"If she enjoys or likes something she's really good at, it... and will participate more in it. And something more challenging, she will back away and withdraw and it's difficult to try to get her to focus on the areas she has weaknesses in (Parent)."*

#### Finding 4: LD affects children's self-esteem

Self-esteem, confidence, and emotional issues are common across most interviews. Parents and children recognize these issues as negative, and something they would prefer to not deal with. Both children and parents did not directly attribute issues of self-esteem, confidence, or negative emotions to the LD but rather, to situations not related to the LD, evident in the following interview excerpts:

*"well it makes me feel bad because he doesn't, he doesn't see all the good qualities he has, so you know if you... and say you did... you know when you try*

*and complement him on a good... he doesn't... kind of... he doesn't... it's almost like he doesn't believe, it's like 'my mom is saying it because she has to' (Parent)"*

*"I always feel bad about myself. Oh it's just this self-esteem thing; they [other kids] kind of lower my self esteem a bit (Child)."*

*"...it would give him more self confidence and um, that's something that he lacks in, so I think if he kind of believed, you know that he did well at a lot of stuff and that would make him a bit more confident (Parent)."*

*"...is listening a skill? ...Does video games count? ...Can I explain gym? ...Are you asking for names or? ...I get nervous and there goes your mark... (Child)"*

*"...he gets frustrated too...he's the passive type, so it's impossible for him to carry out what he learned, its complex for him, the social situations... (Parent)"*

*"...they come to cheer me up...when I'm sad they help me. (Child)"*

*"...well, I guess he might feel a little more confident, a little bit more at ease and I'm hoping he's um... (Parent)."*

#### Finding 5: Social issues faced by children with LD

Social issues also cut across all child interviews. Each child either mentioned or insinuated that they faced problems with teachers, peers, or certain social situations. While recipients of the social skills program however, it is evident that the issues faced are not as impacting as they may have been had they not been a part of the program, evidenced in their parents' comments.

Child: *"I don't like oral communication. I just don't like saying things in front of people because I get nervous..."*

Parent: *"he's maturing and um... I think a lot of people who have seen him years ago don't realize how much he's changed, that he's maturing in a positive way...I would say the ones [strengths] that I have given you have been more recent...he's following instructions more than he used to...it would be four time you tell him to do something and now some of the things are automatic..."*

Child: *"Well only if the kids tell lies about me, when they do then I do get into trouble...I had those bullying troubles in November, but they got used to me...she [the teacher] just moves my place somewhere else...pretty much the rest of the year and then moved back to that spot and those girls keep kicking my chair again"*

Parent: *"...they call it friendship class...he loved it because the teachers there are well trained and he never encountered this training at school. They are trained to handle these types of kids, who are different. And it really helped him...it helped him theoretically...none of the parents asked us for the phone number afterwards...none would think about reinforcing the things that they learned?...it works idealistically with good kids and good families, but it is not able to be imparted in the public school systems..."*

Parent: *"friendship club...a group for friends, so he sees others who has the same problems he does and the kids go through the same things, they're not all smartie pantses...I guess he might feel a little more confident"*

Also evidenced in both parent and child interviews is that the presence of LD in a child, pervades that child's life not only within but also outside of the academic realm. Whether it affects his or her relationships, emotional well being, or interaction in various environments, LD becomes evident in various areas of the child's life. For instance, when interacting with the researcher throughout the interview, there was much observation of the attention, behaviour, or social problems faced by all the children who have learning problems and ADHD. Parents also explained situations at home where evidence of the LD/ADHD becomes a problem.

*(While playing with the researcher's scissors...trails off and begins talking to himself)... "Chop chop, chop chop...Did I just turn on the radio in my head? ...that's weird we shouldn't talk about that. Did I just turn on the radio in my head?...Did you hear about the flood that happened in the public library, it happened in the spring? It must have been really bad...look at all your crayons! (Child)"*

*"...soccer football and that's it...that's one of my favourite spots in my school and that's it...when I'm sad they help me...what's the next question...they solve the problem and stuff like that. What's the next question...help me in math or something or... Any other questions...yeah, skip, can we skip that one (Child)"*

*"...it's a whole process that we have to do...it's like pulling teeth...it would be four times you tell him to do something...like your basic go make your bed (Parent)"*

*"...he plays soccer and ah if the team doesn't win, he thinks it's his fault, so he puts a lot pressure... (Parent)"*

*"He has a bit of an eating thing...I don't pick that many battles with him, he actually calmed down a lot, he has anxiety...he's already fighting a battle at school and he's got another with food (Parent)"*

*"he might try to stretch his bedtime, and with his sleep disorder he gets up several times a night if he has to...I'm hoping he's different at school when teachers give him time frames...he stretches [it] to infinity (Parent)"*

*"...I'd say trying to get along with other individuals, like socially...sometimes she can be a really mean person, I don't know where it came from...I think socially she has difficulty, I don't know what it is... (Parent)"*

#### Finding 6: Children learn to recognize their strengths and use them to cope

Finally, in looking only at child interviews, the external and internal assets they possess and use to cope with LD became evident. These indirectly relate to whether their school promotes dependence or independence to help children with LD cope with the challenges they face.

*"...I get nervous saying things in front of people...ah...cue cards help me in subjects that I am not great in... (Child)"*

*"I don't ask myself anything...this lady comes in and checks it off for me, and math and other subjects I ask the teacher... (Child)"*

*"Like somebody, like at the same level, like other students that I know are smart... (Child)"*

*"Um well, when I come back from school my mom comforts me; I go to ...anyways, well playing with my friends, people who are my real friends... (Child)"*

*"You don't want to bother the teacher, that gives them more work than they need, they say. I don't want to bother them, but they are supposed to help...I would just comfort myself and go to my mom. And ah, think of good things and try to tell jokes at myself in my head...Did I just turn the radio on in my head (Child)"*

*"Well let's say this, I could try to comfort myself and laugh in my heart (Child)"*

*"I'll probably say the principle... he can solve anything... (Child)"*

## Discussion

### Researcher Self-Disclosure

#### Personal Experience

My personal experience with nonstrength-based approaches stemmed from my numerous attempts to teach my younger brother how to read. These attempts were without knowledge of the strengths he possessed and were fraught with difficulties and frustrations. In looking back, knowledge of his strengths may have helped both of us during the process. My brother struggled with a reading disability throughout his elementary and secondary school years. What pervaded these years was discourse surrounding his weakness, such as what needed to be “fixed” and the things he did not do so well. On the other hand, the strengths my brother possessed were hardly discussed. Therefore, his ability to excel in areas other than academic pursuits, such as his love of the arts and his skill of creativity, went unrecognized.

*“... [What about the teachers?] Yeah, but not all the time, and I would rather it’d be not all the physical strengths that I [already] saw, but more on the academic end. For instance, if I was doing a math problem or in English if I made a story, I rather them congratulate me on those because that’s something that would help me more in life and something I’d need to compensate my weaknesses (Brother)”.*

Teachers, psychologists, interventionists, and the majority of individuals in the public school system who worked with my brother, all placed emphasis on the LD when attempting to help him. Thus, in not acknowledging the characteristics that make my

brother who he is, that is, the internal and external developmental assets, the public school system lead him to believe he was not able to conquer his academic challenges.

*“I felt that I wasn’t 100 percent...and they made me feel inadequate, so I knew I was lacking something and I knew that I was good at things but I felt that reading and writing was hard and I didn’t understand and was confused and frustrated....when I had to do a task that I knew was going to be hard for me (Brother)”*

In recently speaking with my brother, I learned that in addition to his academic struggles, there were emotional struggles, which caused temporary damage to his overall well-being. For instance, he experienced frustration, confusion, low-self esteem, lack of confidence, and lack of self-efficacy. He attributes this damage to his experience in the public school system, which he believes failed him, rather than him failing it. In fact, it greatly contrasts his views of the private school, which he asserts:

*“...they [teachers] were prompted on what my disability was so they could focus on where I had weaknesses. I just...since everyone roughly had a somewhat similar disability whether reading, writing, or focusing...I could work at my own pace that I was comfortable with and that was something I could handle. I felt in the public school I had too much to live up to (Brother)”.*

Despite the above, my brother has come a long way and has realized that:

*"...there's always room for improvement. But, I'm very proud of myself for how far I've reached and the job I have and that I can utilize what I learned and I have enough confidence to do anything I put my mind to (Brother)"*

In retrospect, if the public school teachers were aware of his specific learning style and the strengths he possessed, such as knowing:

*"I'm good at more visible things where its more me and the problem and I don't really have to face anyone and there's no real nervousness, I don't get nervous (Brother)"*

In knowing this, they may have been able to help my brother realize his strengths while in the public school, rather than him having to go to a private school, separate from friends and family, in order to realize these strengths.

#### Perspective

This study has been guided by a constructivist view of how knowledge is created. Thus, a belief in a paradigm that views a social world in a way that is understood through a relationship, one between knower and knowledge, which already exists, is imperative for the understanding of this research. Accordingly, definitions of LD and interventions from a social perspective may have different meanings depending on whom it is experienced by. For individuals involved in the present study and for subsequent readers, the knowledge created is a mixture of the participants and researcher's past and present knowledge. This new knowledge may alter the knowledge of the reader who may or may not hold a different view, since the created knowledge is subjective.

#### Summary Thoughts on Research

In reviewing the results of the study, it was found that most of the participants described a failure of the public school system to acknowledge the strengths that were similar to my brother's experience several years ago, such as in the following participant's experience:

*"I don't seem to remember them saying anything about his strengths! I remember them saying about him being behind, not aware of danger and runs quick, fasts, runs, that's what I remember, not aware of danger... His personality is nice, he tries to ...what are the words they use... he tries to engage! (Parent)"*

This suggests that, although the school system has evolved in many ways, over the years, its response to children with LD has not changed significantly. Based on the experiences of participants in the public school, it could be inferred that children with LD continue to suffer from frustrations and self-esteem issues in their learning process. Furthermore, there seems to be no strategy in the schools for identifying and tapping into children's non-academic attributes, such as personality characteristics. For instance, opportunities for girl1 to utilize her interpersonal strengths may be limited. Particularly, the following personality characteristics: *"always helpful, wanting to help others...kind"* may help her with the difficulties experienced because of her LD. For example, since girl1's father has concerns about her getting along with peers, in a classroom a teacher may reinforce her positive personality characteristics so that she knows she has strengths in sharing and helping others.



To focus on promoting strengths in children, we need a clear idea of what those strengths are. That is, something that stands exclusively on its own, separate from weaknesses. Thus, as recipients of a strength-based program, children's developmental assets are cultivated, and their relationships, strengths, and abilities are emphasized and continually reinforced. The literature on strengths in children with LD, indicate that although strengths are not easily measured, since it is subjectively defined, it does appear even when unspecified or uncultivated. Strengths stand out as positive characteristics in the individual and may provide protection against problems faced in childhood (Pollard & Rosenberg, 2003). For the reason that they provide this protection, it is important that a strength-based program discover and use recipients' strengths.

In order for a child to cope with LD in a healthy way, the LDAYR recognizes and appreciates this child's strengths and uses it to promote self-confidence in order for the child to be able to use skills learned in the program in all areas of his/her life. Use of these skills is important because LD may be manifested differently depending on the demands of the environment. Thus, the child may experience impairment in certain situations only.

Public schools in Canada ought to develop a program or inclusive intervention for classrooms that target children with LD. Ideally; it should have components similar to the LDAYR program. For example, by drawing on children's strengths by using positive reinforcement such as stickers, as provided to tutors in their start-up kit before they begin to work with a child with LD. Also provided are various trinkets, toys, art and craft supplies, and training manuals on how to teach using a child's strengths, so that when in

the field, the tutor may use what the child enjoys to help the child learn. For example, if a tutor is working with a child to teach him or her math, and has learned that the child has strengths in/enjoys soccer, the tutor can use soccer players/soccer balls or even the game strategy to teach a math problem. Or, if a child has a strength in singing but a weakness in reading fluency, a tutor may have the child sing words aloud, similar to a game, where it can be speeded up to the tune of a song. These are merely examples, and demonstrate that what a child brings to their learning environment can be very useful in teaching him or her, especially when attempting to make their learning experience enjoyable. An enjoyable learning experience is one that children will remember and that will be more impacting on their academic lives, as a child participant asserts on more than one occasion:

*"...you just play and enjoy yourself, school isn't supposed to just be about work, you have to have fun too (Child)"*

*"some people say school is meant for work... it's more like a chore, like if you play then you can learn from it, if people want to learn then it's fun and they will have fun...if its only games at school, I call it play-learn then they say oh learning is fun! (Child)"*

Interviews indicate that recipients of the LDAYR program do indeed recognize their strengths and can quickly identify them. Thus, the program has likely fulfilled its function in placing emphasis on strengths rather than deficits. The public school however, has placed emphasis on the weaknesses of the child, evident in the fact that, when interviewed, participants mentioned weaknesses together with strengths. They do not

define strengths as a distinct entity, particularly when asked, "What strengths do you posses (directed toward child participants)? Or, what strengths does your child posses (directed toward parent participants)?" This failure to define strengths as an entity of its own may be for several reasons. For instance, recipients may feel that LD is a weakness in and of itself, rather than a unique ability to learn differently. Alternatively, recipients may not possess the confidence and assertiveness to say that these are the strengths, which are separate from weaknesses. Participants may also feel the need to mention weaknesses upfront for themselves, rather than hearing it from someone else so as to prevent potential emotional harm.

As the above-mentioned literature review indicates, different individuals perceive LD differently, whether it is a teacher, child, or parent, and whether those individuals adhere to cultural norms or personal ideals about what a disability is. For those who believe it to be a label that once attached to the child also defines that child, they may have difficulty seeing the strengths the child possesses. That is to say, when individuals view LD as a weakness/a deficit that outside sources can fix, it becomes difficult to see the positive internal characteristics that one can also use to "fix" the problem.

Alternatively, the learning style attached to specific LDs also define one of the child's strengths, and thus while mentioning non-academic related strengths, such as "good at sports", the recipient can mention academic related strengths such as "learns visually". This particular strength may give the learner the advantage of absorbing information that may not be acquired with only the use of an auditory learning mode. Knowledge of learning styles is crucial in order to be defined as a unique characteristic that is strength.

This knowledge gives children with LD opportunities to be seen as students who are positively different from their peers.

The majority of parents interviewed indicated that their child had issues with self-esteem and confidence. Parents however, noticed that after being in the program this improved. The emotional impact of LD is profound and can affect a child's overall well being, thus programs like LDAYR ensure that issues of self-esteem and confidence do not come to the forefront of a child's coping, and have benefits not only in the child's present life but also throughout his or her lifespan. Similarly, responses from child interviews indicate that confidence issues are present in their lives, however, are in the progress of developing from a lack of confidence to a healthy level of confidence. All children interviewed mentioned their strengths and appeared to be proud when listing them. They even recognize that extracurricular activities that they are good at can also be deemed strength. For instance, in saying "[I am good at] soccer", "[I am good at] skating", or "[I am good at] basketball", things the child probably also enjoys, the child's assertion can be an indicator that if he or she enjoys a particular subject, it can still be considered something he or she is good at, although they may have heard otherwise. If a teacher tells a child he is not good at English but he knows for himself that he is good at writing short stories or has an excellent vocabulary, it is important for that child to know these strengths can be recognize by himself. What a teacher may see as a child's weakness may in fact be his or her strength.

Typically, children learn about themselves through other people. Many may agree that the development of children's self-concept comes from how others treat them, how

others react to them, what others expect from them, and of course, what others say about them. This means, if children with LD are continually told what they are not good at and they only hear about their disability rather than abilities, and that they need to be "fixed", there may inevitably be damage to their self-concept. When children with LD have negative self-concepts, how can they cope in a positive way? Since strength-based approaches are predicated on the practice of psychosocial competence, children with LD have an opportunity to reach optimal potential within the academics, in using this approach, they become aware of the attributes they possess to gain active control over their coping (Jones, 2004; Tyler, 2002).

There are both emotional and behavioural effects of LD. Both are evident not only in the child's school but also in the home, as indicated by parents who participated in the present study. Whether it is the social or emotional impact of the disability, it becomes evident in many of the child's social-ecological environments. In fact, the researcher noticed the attentional and emotional affects of LD when conducting child interviews. For instance, many children were distracted and fidgeted or abruptly changed the topic when it was laden with emotion (for the child).

In order for children to be prepared for a transformed education system, they ought to embrace their LD. This is a benefit to them because the transformed education system will require more independence and be more accepting of diversity and be inclusive of children with and without disabilities, as mentioned in the above literature review. By becoming empowered, assertive, and independent, students with LD will be more likely to succeed in a society that requires them to be self-advocates. As the

LDAYR's mission states: the goal is to provide services for advocacy and full participation for individuals with LD in our society. The organization accomplishes this through the valuing of social justice, diversity, and inclusiveness.

Child interviews for this study also indicate that children in the LDAYR program show that there is a need for independence when it comes to coping with their LD. Many child participants mentioned that what/who they think can help them with their academic difficulties are their teachers, peers, or parents, with no mention of themselves. Although, teachers are indeed important individuals to help a child cope, it is important for children to know that relying on their own assets is also beneficial, especially since it prepares them for independent learning. Some readers may agree that it is admirable the children interviewed recognize that they have external sources with which they can rely on to cope with LD. However, recognition of the internal sources, things within themselves such as confidence, self-efficacy, and nurturance, are assets that can be used when faced with the difficulties of having an LD, thus promoting independence within classrooms.

Being too dependent in a public school that is transforming, may be especially damaging for students with LD. This is because, once outside of the school, without adequate advocacy, children with LD may not be able to access the services that they need and may inevitably suffer in society alone. In joining such programs as "Social Skills", which the LDAYR offers to children with LD and ADHD, and which the children involved in the study are recipients of, children are exposed to situations that are akin to real life. Programs like these are geared toward healthy integration into society,

thus preparing children with LD to become independent citizens who have control over their own behaviours and emotions.

Without independence in a public school setting, Chupik and Wright (2006) state that psychiatric discourse predominates, and families and children with LD are "left to the whim social policy and technical treatment by professional groups" (p. 83). This statement means that parents do not have much choice in the treatment options for their child with LD. Hence, if left to the public system, parents and children inevitably become recipients to a pathologized treatment option. This type of treatment likely will result in less empowerment and control over how parents and children cope with LD.

In this study, most of the child participants tend to cope with their LD by spending time with peers and interacting with others, such as a parent or friends outside of the school environment. On the other hand, the girl whose father participated in the study, does not cope with her LD in a similar manner. She has a hard time getting along with peers, as evidenced in her father's interview: "... *she can be a really mean person...I don't know if it's because she's jealous or what*". Perhaps, since the child participants in the study are recipients of the LDAYR social skills program, it gave them opportunities to learn how to interact with peers, while girl1 did not have the benefit of the experience. The boys in this study also have a different external outlet to cope with their LD than girl1, who did not have this outlet.

The slight differences that male and female children may exhibit when coping with an LD may be the difference in an individual reaching their full potential or one being limited in this regard. Therefore, an integration of both the coping mechanisms

used by each gender may be beneficial to an individual with LD in general. As Sandra Bem (1974) suggests, a balancing of the most desirable traits (males: assertive, analytical, independent and females: affectionate, compassionate, and understanding) may result in a more adaptable, likable, and better adjusted student with higher self-esteem (Allgood-Merten & Stockard, 1991). Thus, strength-based models suggest an intervention that provides children opportunity to express their holistic selves. This is an effective way for helping them to reach their full potential (Reid et al., 2000).

Since boys are more likely to show behavioural problems in classrooms than girls are, they are more likely to be the ones who are referred to other professionals for their problems (Mash & Wolfe, 2005). Therefore, research in the area of LD that considers the voices of children may be misrepresented, as a female student's experience with LD may greatly differ from a male's. In view of that, generalizations from the present research must be done with caution, as it may not represent the voices of all children, particularly the experiences of girls in a strength-based program.

Regarding the gender of the participants in this study, the child participants were all boys and with the exception of one male, the parent participants were all females. The male parent participant was the father of a girl with an LD and ADHD. This was not by design, as the participants were a voluntary group. In reflecting on the significance of this, I wondered whether the gender distribution of participants might have had an impact on the study? Possibly!

Regarding the gender of parent participants in this study, it is evident that mothers are the ones who are typically involved with their child's mental health matters,

particularly evident at the academic level, such as at the child's school or tutoring program. With the exception of one parent, all participants in this study were mothers. This distribution may be significant because a mother typically plays a different role in a child's life than a father. Since women are more predisposed to understanding and relating to others' emotions, they are more adept at noticing the negative emotions their child may display and therefore intervene to alleviate some of the effects (Hall, 1998). For example, mothers can comfort their child or talk about the emotions with him or her, research shows that women are better than men are at decoding nonverbal behaviour in other people, such as emotions (McClure, 2000). Recognition of this characteristic is imperative to understanding the present study. This is because, as the data indicates, children with LD face many issues relating to their emotion. A mother's role in recognizing the changes of nonverbal behaviours in her child with LD may inevitably prevent the permanent emotional issues relating to the child's overall well-being.

#### Limitations

This study faced several challenges when gathering data. However, these challenges did not directly influence the outcome of the study in a profound way. For instance, one parent was unable to meet at the LDAYR establishment to conduct the interview face-to-face and therefore preferred to do a phone interview. Since the study calls for volunteers to speak about the mental health of children, the researcher considered it appropriate to comply with this participant's wish, to establish social comfort. The result was an authentic interview that included non-verbal communication, such as sighs, pauses, and "ums", as did the face-to-face interviews. Although visual

body language was not recorded, the aforementioned forms of communication were adequate to analyze both this participant's and her son's interviews. What may have differed if all interviews were conducted face-to-face is the comparing and contrasting of body language during the data analysis.

Data gathering for this study began near the end of the parent support meeting term. Therefore, having only one source for gathering participants may have resulted in a skewed sample. For instance, since support meetings concluded at the end of June, the researcher learned that she would have to recruit from a different source. Her next attempt at recruiting was through posters (see appendix A) in the LDAYR establishment. This was intended to gain more participants; however, she only acquired one participant from this method. Thus, data consisted mainly of participants from one source only, the parent support meetings. Although the one source of participant recruitment did not become evident in the data analysis, a replicated study, which recruits from a different source, may yield different results.

Although the sample selection process was intended to be objective, elements of bias could have been introduced by the fact that the sample was voluntary or self-selected. That is, only parents who have a particular view about LD may have elected to participate in the study. The voices of parents with alternative views will therefore not be expressed in the study. The study will thus give the impression that all parents have similar views about their child and LDs and about how the public school system plays its role. For instance, some parents may have negative thoughts about strength-based approaches to helping children cope with an LD and thus, may prefer a deficit-based

approach. Therefore, a follow-up to this study may include parents who have variant thoughts about approaches to help their child cope with an LD.

An ethical concern, which may be deemed a limitation to this study, is the presence of the researcher throughout the parent support meetings. Since she was not introduced as a researcher to the parent group until mid-way through the meeting, parents who arrived later and who missed her introduction may have felt intimidated by her presence, this may have affected whether or not they decided to volunteer as participants or the extent to which they answered interview questions. Furthermore, the researcher's physical presence in the meeting may have resulted in parents not feeling comfortable enough to participate freely in the meeting. There may have been uncertainty as to whether the meeting's discussion would be used as data also (although the researcher made it clear to participants that she would not). While the presence of the researcher will always have an effect on the potential participants, there was no way of measuring whether or not this effect influenced the research process. A follow up study might attempt to avoid this affect by observing the meeting process from an observation area where parents are not aware of his/her presence.

Finally, in adding supplementary questions to the interview to tailor to the participant's background, that is, children with LD and ADHD, the researcher was required to contact the initial participants and ask questions that targeted behaviour and social problems, which relate to ADHD. She succeeded with two of the four participants; the remaining two were unavailable. This slightly affected data results, since not all the interviews targeted the social part of LD; five interviews out of the seven were inclusive

of the added questions. There were however, sufficient participants to conclude sound results about the social/behavioural problems associated with LD.

### Recommendations

This study's implications suggest recommendations for teachers and for individuals who work with children who have an LD, which may be implemented immediately or over an extended period of time. First, assessments for LD ought to take into account the child's strengths, since this is the point at which the child may begin to identify with the LD. This sets the stage for a repertoire in the assessment that is positive and encouraging, not one that is negative and deficit-based. When the mind-set of those individuals who first introduce the child to LD is focused on strengths, the child will not have an impression that the LD is a handicap, thus he/she will know from the start that an LD is something within his/her control; making their subsequent coping with it, something that may be managed independently or with only a scaffold. Furthermore, the assessment of LD ought to begin to turn away from the use of labels to categorize children. Although they are convenient in helping the child to receive services which will benefit him/her within the academia, rather than it being used to diagnose, the individual doing the assessment may instead highlight, label, and identify the child's strengths, while acknowledging that he/she learns differently.

Second, teachers and others who work with children ought to begin to shift their mind-set so that they are open to seeing students' strengths before the weakness. Similar to the assessment process, this results in a child who is aware that he/she learns different and not in a disabled way. As mentioned in the section 'Summary Thoughts on

Research', children's concepts of themselves are typically formed from how others treat them, react and act toward them. This means that if children think teachers have ideas about them that are negative, such as, "he/she is lazy/does not want to learn/is unteachable", then after some time, that child may begin to think these things of themselves. On the contrary, if children with LD think teachers believe in them and recognize that they have an IQ that is average or above average, with of course many strengths, that child will begin to believe and see these same qualities within themselves.

Third, in order to work toward an inclusive education environment, homeroom teachers should be trained, as are resource teachers, to instruct students with and without disabilities. This means students will not have to leave the classroom and be excluded from his/her peers' to be taught, expectantly resulting in a removal of the stigma of LD, at least in the school environment. Children will not reject the child with LD just because he/she learns different and, equally important; the child with LD will not garner low self-esteem because of having to identify with the label of LD, which often carries negative connotations in the public school system, though the label also provides benefits to services. The low self-esteem and feeling of worth that results from being excluded from a classroom, can lead to a child that drops out of school because he/she may feel embarrassed, ashamed, and frustrated with being different and having to learn separate from the rest of the class. If the child is taught in a separate classroom then it should be by choice, that is, the child's decision, especially because of the significance of the social dynamics of the school environment, particularly in the adolescent years when the child is forming his/her identity.

In adhering to these recommendations, public schools that implement a strength-based approach to helping children cope with an LD will have appreciation for the fact that all children differ from one another. Thus, in embracing children as unique and holistic individuals, programs implemented to help children with LD will target their specific LDs and recognize their strengths, such as, their unique learning styles, coping strategies, and things the child likes to do. A strength-based approach provides all children the opportunity to learn in an optimal environment so that they can reach their full potential.

## Conclusion

Children with LD all differ from one another; they learn differently, are motivated by different things, and have different experiences to bring to the classroom. Their varying backgrounds call for a tailored intervention, an approach that embraces children as holistic individuals. This approach must recognize that children with LD have a weakness, but more importantly, they also possess strengths. With an intervention that only emphasizes children's deficits, as is the case in traditional approaches, recipients may suffer profound emotional or mental distress. Recipients to an intervention that emphasizes their strengths, result in learning the importance of autonomy as an important element to academic development. For children with LD who do not recognize their unique strengths, a start may be to realize that the learning style they possess is unique and is akin to a personality characteristic that may be deemed a strength.

Theoretically, environments that provide opportunities for children to exercise their competence also promote their independence. Therefore, if children have a healthy level of self-esteem, self-efficacy, and confidence they are likely to feel empowered in order to independently learn with only a scaffold. The internal and external assets/strengths children with LD possess are what they can rely on, and what can help them cope (Jennings & Dietz, 2003).

*"...that's kind of interesting ...at some points he's kind of almost overconfident  
...he's not aware of it, but then at the same time you know...he's a good athlete"*

*"I'm good at ...science ... history ... math ... Oh like swimming too... skating. I  
like to read and... I like to play"*

*"...I could just try to comfort myself and laugh in my heart"*



Table 1: Characteristics of Child Participants

Child	Type of LD/presence of ADHD	Program child is recipient of
Boy1	Language expression/ADHD	Social Skills
Boy2	NVLD/ADHD	Social Skills
Boy3	Written expression/ADHD	Social Skills
Girl1*	Reading/ADHD	ABCs 123s

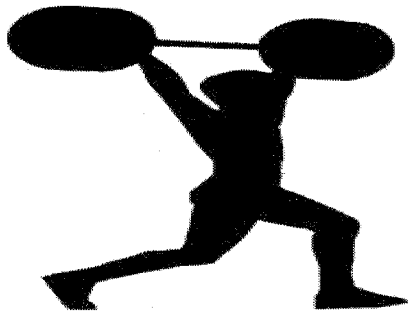
\*The father who participated in this study is not a member of the parent support group; he provided information about his daughter's (girl1) experience in the strength-based program as she did not want to be interviewed.

Table 2: Summary of Research Findings

Findings	Summary
1: Specific problems related to LD are not directly dealt with in the public school system	Parents and children interviewed had negative experiences in the public school or did not feel that specific problems related to LD were adequately attended to. For example, children continue to suffer emotionally and behaviourally.
2: LDAYR helps children cope with LD by recognizing their strengths and positive personality attributes	When others recognize children's strengths, they themselves also recognize them and begin to embrace their LD.
3: Parents and children are quick to list strengths but are also quick to minimize them	When continually told about their disability rather than abilities, children and parents become accustomed to associating strength with weakness. This may be a result of being recipients to a deficit-based treatment option, such as that offered in the public school.
4: LD affects a child's emotional well-being, this includes level of confidence and self-esteem	In continually reinforcing children's strengths, it assures them of their worth and value. Using children's strengths also shows them these qualities are useful, thus builds empowerment, and autonomy in their coping and learning.
5: Children with LD face social issues with peers, teachers, and/or in certain social situations	The social/emotional/behavioural impact of LD is evident in a child's social-ecological environment, therefore teaching him/her how to cope in appropriate ways, leads to a better adjusted child.
6: When children recognize their internal and external assets, they can use them to cope with their LD	When a school fosters both dependence and independence in helping a child to cope with LD, that child has opportunity to utilize their assets in a way that is beneficial to him/her.

Research Project in Effect...

Learning Disabilities and Strength-Based Programs



If YOU:

- want to contribute to the field of LD and education
- are part of the LDAYR program; e.g., parent support group
- have a child (between 5-13) in the LDAYR program; e.g., social skills
- have a child with an LD

Then I

- would like you to be a part of my study

This Entails:

- a brief questionnaire (approximately 6 questions)
- 10-15 minutes of your time, depending on how lengthy or short your responses are
- a consent form to be signed, this gives me permission to use your responses in my study write up (anonymously of course)

I am looking for 4 participants (2 parents and 2 children) BEFORE July 12<sup>th</sup>, 2009

AMANTHA	SAMANTHA	SAMANTHA	SAMANTHA	SAMANTHA	SAMANTHA	SAMANTHA
647	647	647	647	647	647	647
2	2	2	2	2	2	2
8	8	8	8	8	8	8
0	0	0	0	0	0	0
2	2	2	2	2	2	2
4	4	4	4	4	4	4
0	0	0	0	0	0	0
4	4	4	4	4	4	4

An Investigation of a Strength-Based Model as an Approach to Helping Children Cope with a Learning Disability

Dear Parent:

You are being asked to participate in a research study. Before you give your consent to be a volunteer, it is important that you read the following information and ask as many questions as necessary to be sure you understand what your participation involves.

I am a student working in the areas of early childhood and learning disabilities. I am also a tutor for the Learning Disabilities Association of York Region (LDAYR). I am completing my Major Research Project/Thesis under the supervision of Dr. Gloria Roberts-Fiati, School of Early Childhood Education, Ryerson University.

The goal of this research is to obtain the views of parents about teaching strategies that support the learning/educational needs of children with learning disabilities. Strategies in use that draw on students' strengths will be reviewed. This will provide information of an alternative mode of working with students with learning disabilities. This will help parents and educators to effectively support and prepare their children to reach their full potential, regardless of weaknesses.

I will be recruiting 10 participants, specifically 5 parents and 5 children from the LDAYR.

The expected outcomes are, improvement in student success by providing teachers and parents with additional tools for working with children with learning disabilities, enhancement of the overall teaching abilities of educators and parents, and a contribution to the fields of education and learning disabilities.

I am asking you to agree to participate in an interview with myself (the researcher). Each meeting will last approximately a half-hour. You will be asked a total of six questions that are targeted toward strengths and learning disabilities. Upon completion you will be asked if your child has your permission to also participate in the study. He or she can complete the interview with you present if you or your child chooses. I believed a child's voice is as important and valid in research as an adult's. Therefore, your child will be asked six questions as well, these are different than your questions and can be reviewed by yourself before agreement.

During interviews, a tape recorder will be running in order to obtain all information that is discussed. This will later be transcribed (typed out word-for-word) because during the brief time you meet with the researcher, she will not be able to write down everything that is said, while it is all important information. This ensures accuracy so that if a portion of what you say is used in the final write-up, it will be your words exactly. Your child however, will not be tape recorded, the researcher will attempt to write down everything he or she says during the interview.

Interviews are intended to elicit information that will help to evaluate the effectiveness of a strength-based program in helping children cope with learning disabilities. These programs, such as the LDAYR use what children are good at in order to help them learn.

Notes and audio recordings will be stored in locked cabinets and after five years, the data will be destroyed (shredded) and/or erased. Prior to any publication, you will be able to review and edit any information you provided during the meetings.

Participation in this study is voluntary. Your choice of whether or not to participate will not influence your future relations with LDAYR. If you decide to participate, you are free to withdraw your consent at any time, refuse to answer any questions, or refuse to take part in any specific part of the process without penalty or loss of services.

If you have any questions about the research now, please ask. If you have questions later or wish to obtain results of the study, you may contact myself:

Principal Investigator: Samantha Saunders, MA candidate

Phone: (647) 280-2404

Email: samantha1.saunders@ryerson.ca

If you have questions regarding your rights as a human subject and participant in this study, you may contact Ryerson University Research Ethics Board for information:

Research Ethics Board

c/o Office of Research Services

Ryerson Polytechnic University

350 Victoria Street

Toronto, ON M5B 2K3

Your signature indicates that you have read the information in this agreement and have had a chance to ask any questions you have about the study. Your signature also indicates that you agree to be in the study and have been told that you can change your mind and withdraw your consent to participate at any time. You have been given a copy of this agreement. You have been told that by signing this consent agreement you are not giving up any of your legal rights.

Name of Participant (please print)

Signature of Participant

Date \_\_\_\_\_

Signature of Researcher

Date \_\_\_\_\_

Your signature indicates that you agree to be audio taped throughout the interview.

Name of Participant (please print)

Signature of Participant

Date \_\_\_\_\_

☺ Thank you in advance for your participation ☺

**An Investigation of a Strength-Based Model as an Approach to Helping  
Children Cope with a Learning Disability**

Dear Child:

You are being asked to participate in a research study. Before you agree to be a volunteer, it is important that you read this and ask as many questions as you like.

I am a student studying learning problems. I am also a tutor for the Learning Disabilities Association of York Region (LDAYR).

I am interested in learning about your thoughts about learning problems and the LDAYR program. What I learn may help to make your school experience better in the future.

So, I am asking you to take part in my study, where I will ask you 6 questions. If you feel uncomfortable answering any of these question, just say "skip".

While you answer the questions I will be listening and at the same time writing down what you say so that I can use it later in my final project.

What you speak to me about will help me to learn about the LDAYR program. For example, if it is helping you to learn what you are good at and do better in school. But, don't worry, all the information I write down will be kept only between us. If I use any information later, it will not have your name on it, so no one will know who said it.

You do not have participate and if you choose not to, nothing bad will happen. It is completely up to you.

If you have any questions about the research now, please ask.

By writing your name, it tells me that you are interested in being a volunteer in my study. It also tells me that you understand all that you read above.

Write name here	Date
Signature of Researcher	Date

☺ Thank you in advance for your participation ☺

Appendix C: Interview Questions

QUESTIONS FOR CHILD PARTICIPANTS	QUESTIONS FOR PARENT PARTICIPANTS
1. What are you good at?	2. How would you define your child's strengths?
3. What are your favourite classes/things/areas at school? 4. What classes/things/areas do you not like at school?	5. Do you know what specific LD your child is diagnosed with (e.g., mathematics, reading fluency, dyslexia)? 6. What do you see as your child's greatest struggle(s)? 7. How do you think your participation in the program helps deal with your child's LD? a. How does participation in the program help your child? b. How does it help with your child's social skills/getting along with peers/teachers?
8. What do you think helps you when you are having troubles/a hard time at school? a. How often do you have trouble with friends/teachers? b. What happens? c. What does the teacher do? 9. What do you do to help yourself when you are having troubles/a hard time at school?	10. Has anyone (i.e., teachers, psychologists, or interventionists) ever mentioned anything to you about your child's strengths or talents?
	a. Do you think knowing these are beneficial in helping your child cope with his or her LD?
	b. Do you feel school has helped your child to recognize these?
11. Who do you think can help you best/better with these troubles/hard times at school, you or your teacher? a. Do you think when you know the things you are good at, you can help yourself?	

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