Education, Family and Child & Adolescent Health

Editors:
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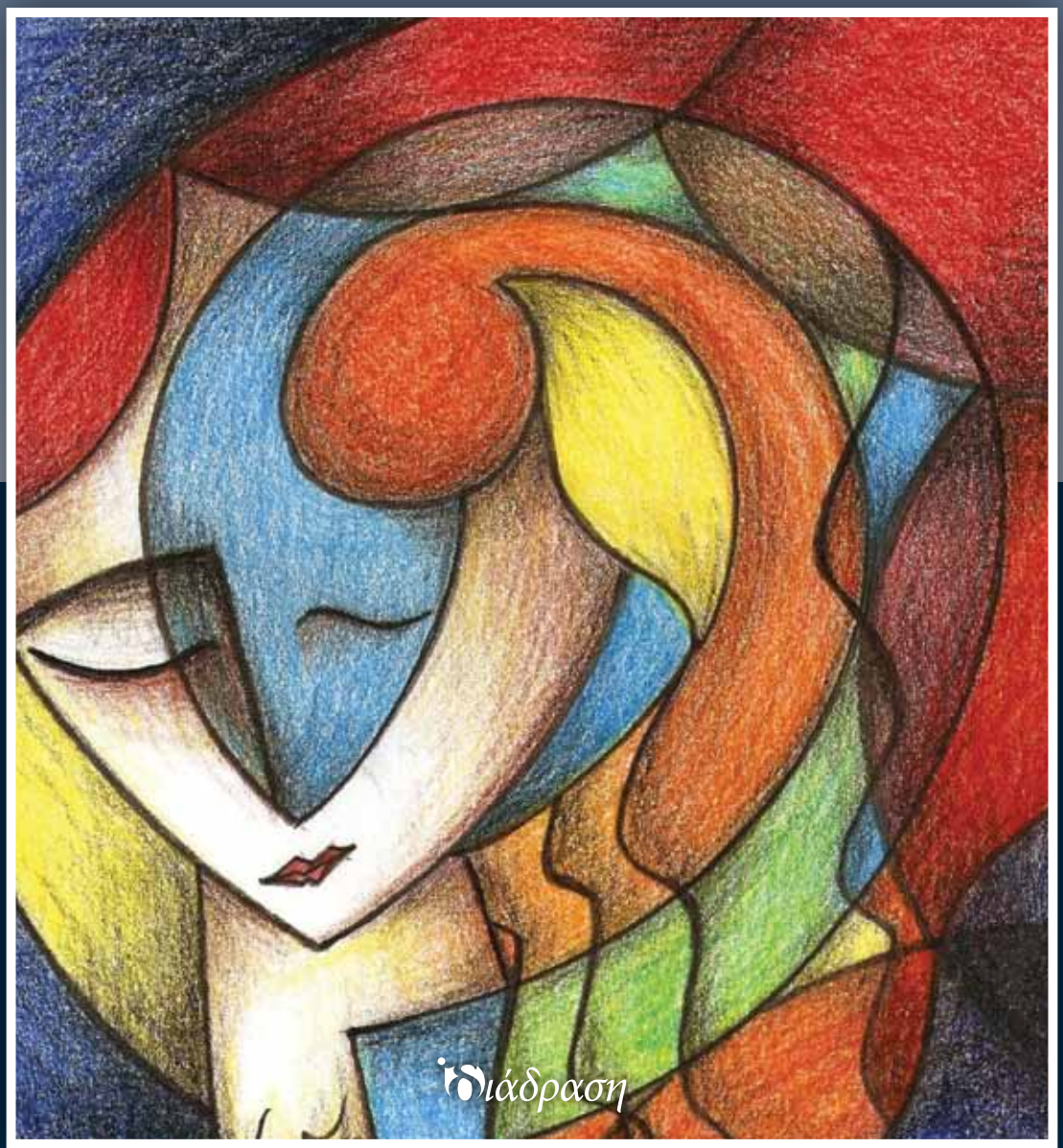

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Εκδόσεις ΔΙΑΔΡΑΣΗ / DIADRASSI Publications
Σουλίου 73, 13461 Ζεφύρι / 73, Souliou str. Zefyri, P.O. Box 13461, Athens, Greece
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ISBN: 978-960-9541-94-7

Education, Family and Child & Adolescent Health
Editors: Alexander-Stamatios Antoniou & Bruce David Kirkcaldy, pp. 93-119

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SOCIAL, EMOTIONAL AND MOTIVATIONAL ASPECTS OF LEARNING DISABILITIES: CHALLENGES AND RESPONSES

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Introduction

Empirical evidence has acknowledged the importance of both cognitive and affective domains in explaining individual differences in academic achievement. In the introduction of a special issue of the Educational Psychologist in 2002, Schutz & Lanehart paraphrased what Pintrich has argued back in 1991 (p.67):

"…it has become clear that emotions are an integral part of educational activity

settings. In the 2000s, researchers interested in teaching, learning, and motivational transactions within the classroom context can no longer ignore emotional issues. Emotions are intimately involved in virtually every aspect of the teaching and learning process and, therefore, an understanding of the nature of emotions within the school context is essential."

Emotions are especially pertinent when considering learning disabilities (LD). Many studies have examined differences between students with and without LD across multiple domains of functioning and adjustment (Elbaum & Vaughn, 2003; Heath & Wiener, 1996; Vaughn, Haager, Hogan, & Kouzekanani, 1992; Wiener, 2004). Results of these studies have often shown that, when compared to peers without LD, students with LD not only have lower levels of academic achievement, but also encounter social and emotional difficulties.

Unexpected and unremitting impairments in the acquisition of literacy are linked to decreased academic performance and possibly long- term social and emotional adjustment difficulties. The predictive validity for LD screening proves to be high when psychosocial characteristics are included in the assessment compared with cognitive variables alone (Watkins, 1996). Moreover, it has been argued that motivation, psychopathology and emotions may not just be characteristics of students with LD but core identifying features and need to be included in the taxonomy of features characterizing students with LD (Sideridis, Morgan, Botsas, Padeliadu & Fuchs, 2006).

Indeed, beyond their academic and cognitive deficits, children with LD frequently experience a range of difficulties throughout their school life, related to motivation and emotion. For example, they present low achievement motivation (Pintrich, Anderman, & Klobucar, 1994), helplessness (Sideridis, 2003), depression (Sideridis, 2007), anxiety (Nelson, & Harwood, 2011. Riddick, Sterling, Farmer, & Morgan, 1999), negative self concept (Chapman, 1988; Polychroni, Koukoura & Anagnostou, 2006), loneliness (Valas, 2001), external locus of control (Palladino, Poli, Masi & Marcheschi, 2000), psychological adjustment difficulties (Grolnick & Ryan, 1990), emotional disregulation (Masi, Brovedani, & Poli, 1998), behavioural problems (Casey , Levy, Brown & Brooks-Gunn, 1992) and high levels of peer rejection and loneliness (Margalit & Al-Yagon, 2002).

There is growing awareness of the contribution of the affective factors to the learning process. Emotions, thinking and learning are all interlinked in the learning process. The purpose of the present chapter is to review the literature with regard to social, emotional and motivational aspects of LD using different theoretical schemes. The chapter is structured in three main sections. The first part reviews the literature on social and emotional skills, academic self-concept, and motivation with regard to LD. The second part deals with issues of risk and protective factors of LD and intervention programmes in the context of resilience research. The third part discusses methodological issues that are often present in studies with children with LD and provides suggestions for future research.

Social competence and social skills of students with learning disabilities

A number of studies have addressed the importance of social competence difficulties of students with LD. Defining social competence is a complex task. There have been many attempts to conceptualise the construct. Vaughn & Hogan (1990) proposed that the construct of social competence is multifaceted and includes four components: a) social skills (e.g., ability to initiate and respond appropriately to others), b) relationships with others (e.g., peer acceptance, peer relationships), c) age-appropriate social cognition (e.g. problem solving), d) the absence of behaviours associated with social maladjustment (e.g., absence of aggressive behaviour). Another conceptualisation, the social validity model, defines social skills as socially significant behaviors exhibited in specific situations that predict important social outcomes for children and youth (Gresham, 1998). As Gresham (2001) argues, socially significant behaviors are those behaviors that treatment consumers (e.g., parents, teachers, peers, and students) consider important and desirable and that predict an individual's standing on socially important outcomes.

Socially important outcomes are outcomes that treatment consumers consider important, adaptive, and functional and examples may be peer acceptance and friendships, teacher and parental acceptance and school adjustment. In this model, social skills are differentiated from social competence. Social skills are behaviors that an individual uses to perform competently or successfully on particular social tasks (e.g., starting a conversation) while social competence is an evaluation that a person has performed competently on social tasks. Other researchers have examined social behavior in terms of learning-related skills (Cooper & Farran, 1991). Learning-related skills encompass behaviors like listening and following directions, participating appropriately in groups (such as taking turns), staying on task e.t.c.

A growing body of research highlights the link between the quality of children's peer relations at school and their academic, behavioral, and emotional adjustment (see reviews of Kupersmidt & DeRosier, 2004 and Parker, Rubin, Price, & DeRosier, 1995). In particular, positive peer relations have been linked to enhanced academic performance, high levels of emotional intelligence, increased commitment to school and adaptive coping strategies (Berndt, 1999; Ladd, Kochenderfer, & Coleman, 1996; Petrides, Sangareau, Funham & Frederickson, 2006). Conversely, failure to acquire adequate levels of social skills is associated with academic difficulties (DeRosier & Lloyd, 2011; Doll, 1996; Guay, Boivin & Hodges, 1999; Malecki & Elliott, 2002), high rates of absenteeism and dropout (Cairns, Cairns & Neckerman, 1989) lower quality of life and mental health problems in adult life (Westwood, 2008).

More research has demonstrated that children with LD are more likely to experience social adjustment difficulties than typical peers (Al-Yagon & Mikulincer, 2004; Kavale & Forness, 1996; Margalit, 1994). There is also evidence for a direct

relationship between LD and acquiring social functioning skills (Meadan & Halle, 2004; Wiener, 2004). A number of students with LD display social skill difficulties and peer rejection in particular (Kavale & Forness, 1996). The meta-analysis by Kavale and Forness (1996) revealed that 75% of students with LD manifest social incompetence that differentiated them from typical peers. Social incompetence may include difficulties in social competence, social cognition, social behaviour, social relationships, peer status, interpersonal skills, social adjustment, classroom behaviour and communicative competence (Kavale & Mostert, 2004).

In the study by Vaughn and her colleagues (1990) peer acceptance and self-perceptions of students at risk for LD prior to identification were compared with their NLD peers. Results revealed that as early as 8 weeks after entering kindergarten, children at risk for LD who were later identified as LD differed significantly from their NLD peers on social variables and behaviour problems (Vaughn, Hogan, Kouzekanani, & Shapiro, 1990). These skills deficits may in turn lead to social rejection and unstable relationships (Bryan, 1998). Indeed, Wiener and Schneider (2002) found that the students with LD had significantly less stable friendships than their typically achieving peers.

Moreover, children with LD can be at a higher risk of receiving teasing and bullying behaviours (Bender & Wall, 1994). Peer rejection is associated with high levels of anxiety, worry over being teased or bullied, which interferes with concentration in the classroom and children's acquisition and retention of information. DeRosier and Lloyd (2011) supported that negative outcomes such as school failure or dropping out, may actually occur during adolescence, but the downward trend begins much earlier. Along the lines of previous research, Al-Yagon & Mikulincer (2004) found that school-age children with LD considered their patterns of close relationships as less secure than did their non-LD peers and reported higher levels of avoidance and anxiety in their close relationships.

While the social skills deficits of children with LD are well recognised in research, their etiology is less clear. Numerous hypotheses, often contradictory, have been suggested. Researchers have proposed that neurological problems that impair LD children's cognitive functioning may also cause deficiencies in social functioning (Tur-Kaspa & Bryan, 1995; Vogel & Forness, 1992). Deficits in this area may come as a result of a skill which has not been established and consequently cannot be performed or due to a competing deficit, which prevents the acquisition or performance of a particular social skill (Kavale & Mostert, 2004).

Another explanation for the social skills deficits is poor social information processing skills (Tur-Kaspa, 2002; Tur-Kaspa & Bryan, 1995). Students may display a distinct pattern of processing social information, and non-verbal cues exhibiting a unique problem in the encoding of social information and tend to select incompetent self-generated solutions to social situations. Among other explanations are poor language and communication skills, difficulty recognizing and interpreting others' emotions, cognitive processing and social-emotional problem-solving difficulties,

academic problems, repeated failure and low self-esteem (Elksnin & Elksnin, 2004).

Possible oral language and communication skills impairments lead to difficulty in finding the right words and delays in oral responses resulting in ineffective interactions in social contexts. These deficits may add to the social communication disadvantage of children with LD especially during adolescence, when language becomes central to peer relationships. Moreover, Gresham differentiates social skills acquisition deficits from social skills performance deficits (Gresham, Sugai & Horner, 2001). The first refer either to the absence of knowledge for executing a particular social skill even under optimal conditions, or a failure to discriminate which social behaviors are appropriate in specific situations. The second refer to the presence of social skills in a student's repertoire, but failure to perform these skills at acceptable levels in given situations.

However, as suggested earlier, evidence on deficits in interpreting social cues is far from conclusive. A number of researchers have argued that not all LD students experience difficulties in social adjustment and that it is not absolutely certain that social problems can been viewed as a core identifying feature of LD (Forness & Kavale, 1991). It is the academic deficits and educational isolation which lead to the social problems as side effects (LaGreca & Stone, 1990) by decreasing children's self-confidence and by causing peer group rejection or isolation (Kavale & Forness, 1996). In another research, it was found that children with dyslexia build positive relationships with their peers and have numerous friends (Frederickson & Jacobs, 2001).

A recent study examined the psychosocial adjustment of primary school children with LD in the school setting using teacher ratings (Hatzichristou, Polychroni, Besevegis, & Mylonas, 2008; Polychroni, Hatzichristou, Besevegis, & Mylonas, 2009). According to the results, the LD group received lower ratings than their typical peers on school, social and emotional adjustment indicating adjustment difficulties whilst ratings were higher for behaviour problems indicating increased problems. Statistically significant differences were observed on the emotional competence scale and, in particular, empathy and stress management, and the problem behaviour subscale and in particular externalizing behaviour problems (aggression) and hyperactivity.

Emotional competence of students with learning disabilities

Social and emotional competence are inextricably linked, frequently perceived as inseparable. The five domains proposed in Goleman's (1995) model of emotional intelligence include social skills, i.e., self-awareness, self-regulation, motivation, empathy, and social skills. According to Saarni (2000), there are eight skills of emotional competence, i.e., awareness of one's emotional state, ability to recognise

others' emotions, ability to use the vocabulary of emotions, empathy, ability for adaptive coping with aversive or distressing emotions, emotional self-efficacy, ability to recognise that inner emotional state need not correspond with the outer expression e.t.c. Children with LD may encounter emotional difficulties (Bryan, Burstein & Ergul, 2004; Elksnin & Elksnin, 2004; Margalit & Levin-Al-Yagon, 1994; Terras, Thompson & Minnis, 2009). Specifically, children with LD may present difficulties with self-regulation of affect, stress management, controlling emotions and they react non appropriately when provoked (Masi, et al., 1998; Sideridis et al., 2006a).

The emotional difficulties of children who display anger and the aggression, which frequently accompanies it, are likely to be cached in other deeper negative emotions. Even at a young age, children with LD may experience feelings of envy towards their high achieving peers, by comparing themselves in terms of academic abilities, such as reading, writing, and mathematics. Sometimes, feelings of envy can be repressed leading to manifestations of resignation and apathy. In such cases it is not so obvious to identify the anger which accompanies envy and lies beneath (Bowers, 2005).

Moreover, persisting failure is associated with feelings of anguish, frustration and embarrassment. Many of these children experience the frustration of low school performance in different areas, and others' perceptions of lack of ability and competence. Their frustration often centers on their inability to meet not only their own expectations, but also those of their teachers and parents. Children who fail to perform well within the classroom, tend to receive less teacher approval and praise than other children (Fontana, 1995). Trying hard, asking for help and not receiving any, can lead to high levels of frustration (Edwards 1994). As a result of feeling embarrassed for being inadequate, children with LD will frequently hide their difficulties by avoiding demanding tasks, which in turn will lead to reduced exposure to learning opportunities as compared to non LD children.

Moreover, children with dyslexia may feel more anxious and insecure when they think that they are going to be unfavorably criticised or rejected (Chapman, 1988; Hawkins & Lishner, 1987; Williams & McGee, 1994). Coupled with the perception of school as a threatening situation, feelings of humiliation, fear of failure, social anxiety, panic and withdrawal are few of the consequences (Chapman, 1988). Anxiety, a particular form of emotional distress is thought to be frequently experienced by students with LD (Nelson & Harwood, 2011). As they cannot anticipate failure, entering new situations becomes extremely anxiety-provoking. Anxiety causes individuals to avoid whatever worries them and sometimes this is interpreted as laziness or apathy. Relatively few empirical studies have been carried out on the association between LD and internalising adjustment difficulties, such as anxiety and depression.

The meta-analysis by Nelson and Hardwood (2011) did not indicate that the LD population, on average, experiences clinically significant anxious behaviour, although they confirmed the assumption that students with LD experience higher anxious

symptomatology than their non- LD peers. These findings are in line with those of Carroll, Maughan, Goodman and Meltzer (2005) who concluded that children with reading difficulties were at increased risk of generalised anxiety disorder and separation anxiety, but not of specific phobias or other anxiety diagnoses.

Feelings of anxiety sometimes may become a greater obstacle to learning than the LD themselves by multiplying the learning deficits or causing avoidance of academic work. High levels of anxiety introduce distracting task-irrelevant functions into the information processing system, disrupting intentional focus and consuming working memory (Eysenck, Derakshan, Santos & Calvo, 2007). In the long term, persisting high levels of anxiety can affect academic achievement and gradually contribute to negative educational outcomes, such as academic failure and school dropout (VanAmeringen, Mancini, & Farvolden, 2003).

In severe cases of anxiety and stress, the outcome may be that students manifest signs of depression (Sideridis, 2007). Thus, it is not surprising that LD have been associated with symptoms of depression. Depression, as well as anxiety, is a state that adversely affects an individual's ability to concentrate on the learning process. Research evidence reveals that the percentage of children with LD who experience depression problems is higher than that of typically performing peers (Webber, Owens, Chorlton, & Kershaw, 2002). Moreover, Sideridis (2005, 2006a) found that in 88% of the LD studies reviewed, levels of depression were higher than the typical normative rate of 10% to 15% (Nolen- Hoeksema, Girgus, & Seligman, 1992). However, children with LD are at no greater risk for experiencing severe depression than their non-disabled peers (Maag & Reid, 2006).

Internalising problems have received less research attention and a few recent studies suggest that children with reading difficulties are not at increased risk for internalising psychopathology (Maag & Reid, 2006). However, these specific findings may be attributable to methodological issues (definition of depression and very small sample sizes respectively), and a larger body of evidence indicates that there is an association between language difficulties and internalising problems such as anxiety, depression or social withdrawal (Arnold, Goldston, Walsh, Reboussin, Daniel, et al., 2005; Hickman 2005; Carroll & Iles, 2006; Carroll, Maughan, Goodman, & Meltzer, 2005; Lindsay & Dockrell, 2000; Riddick et al., 1999). Symptoms of anxiety and depression remain significant after controlling for comorbid ADHD (Arnold et al., 2005).

Academic self-concept and learning disabilities

Self-esteem is an important component of psycho-social adjustment and emotional well-being. The term self-esteem refers to the thoughts and feelings that people have about themselves in general, but more specifically with regard

to the task or activity under consideration. According to the multidimensional and hierarchical model of self concept (Harter, 1999; Shavelson, Hubner & Stanton, 1976), general self-concept is a higher entity that contains domain specific aspects of self-esteem such as academic ability, peer relationships, romantic relationships, physical ability, physical appearance, e.t.c.

In a society where literacy is a highly valued skill, a perceived inability to acquire that skill is highly likely to have a negative effect upon any individual's conception of themselves as competent (Burden, 2008). Starting from a young age, important individuals such as teachers and peers reflect an image of the child which, if constant, is incorporated into the child's developing sense of self (Humphrey, 2002). From the age of 7 onwards children start to compare themselves with their peers and if then, they feel that they are less competent than others, especially in such important areas as reading and writing, there is a significant decrease in self-confidence (Ingesson, 2007). The effects of early failure and loss in self-confidence can be present until adulthood. As a result, children are likely to avoid reading tasks and occupations involving literacy or mathematic skills, and make choices according to their perceptions of their abilities (op.cit.).

An apparent difficulty to acquire literacy skills is expected to have a negative effect upon individuals' conception of themselves as competent (Burden, 2008). Research findings provide evidence supporting the view that children who experience problems in learning tend to adopt negative self-referential styles and consequently develop low self-concept (Humphrey, 2002; Vaughn & Haager, 1994). Research suggests that self-esteem is often low in reading disabled populations, with children and young people reporting lower global self worth, lower perceived competence in academic domains (Burden, 2008; Jones & Heskin, 2010; Humphrey, 2002; Zeleke, 2004). There is evidence that low self-concept may remain constant over time (Vaughn, Elbaum, Schumm, & Hughes, 1998) or decrease as children move from grade to grade, if they continue to struggle without appropriate support (Burden, 2008).

However, children's self-perceptions are less negative, when they rate their intelligence and their general self-concept (Westwood, 2008) in other words, self-esteem is domain specific. Although a large body of research indicates that self-esteem is often low, it is important to note that this is not always the case. In his meta-analysis, Chapman (1988) reviewed the association between LD and various aspects of self-concept in the studies carried out between 1974 and 1986 and did not find significant differences between children with LD and their non-LD peers. This conclusion in regard to global self-concept was also supported by the findings of more recent studies (Chapman, Tunmer, & Prochnow, 2004; Cosden & McNamara, 1997; Frederickson & Jacobs, 2001; Gadeyne, Ghesquiere & Onghena, 2004; Gans, Kenny & Ghany, 2003; Stone, 2004; Terras, et al., 2009).

Moreover, the meta-analysis of Bear, Minke and Manning (2002), also supported that students with LD appear to accurately perceive their difficulties

without, however, preventing them from feeling positive about themselves. To avoid misleading conclusions, Zeleke (2004) in his meta-analysis concluded that specific aspects of self-concept need to be reviewed and analysed across domains rather than from a global perspective, supporting the suggestions of Vaughn, Elbaum & Bordman (2001) that not all students with LD will present low self-concept. Along these lines, Polychroni, et al., (2006) found that the children with LD consistently displayed significantly more negative perceptions about their abilities in all the academic domains compared to their peers.

The type of school LD children attend may account for the variance in the findings for self-esteem. One the one hand, it is suggested that inclusive settings are expected to protect children with LD from the stigma and on the other hand, it has been argued that inclusive settings may decrease the self-concept levels of LD students as a consequence of the negative comparisons between them and their higher achieving peers and therefore, special schools can make a positive contribution to the self-concept of the students (Elbaum, 2002; Jones & Heskin, 2010). Moreover, children who attended specialist schools for dyslexia are less likely to report low levels of self-esteem than dyslexic children in mainstream schools (Humphrey, 2002; Humphrey & Mullins, 2002a; 2002b). Finally, the two meta-analyses of Bear et al., (2002) and Elbaum (2002) found no differences regarding the self-concept of children placed in segregated settings and those receiving special educational support in regular schools.

Motivational aspects of learning disabilities

There is little doubt that motivation plays a central role in influencing learning and achievement in school and beyond. There are multiple conceptualisations of the construct of motivation, however, it is recognised that motivation increases determination and persistence to the task at hand. Low academic performance leads to low self-esteem, perceptions of the self as failure which in turn leads to reduced effort, further failure, and poor academic performance (Licht & Kirstner, 1986). If the learner does not feel confident about success, or if the task is not valued, very little effort will be expended and low achievement is anticipated.

Ample evidence exists suggesting that children with LD present low motivation (Bender & Wal, 1994; Bouffard & Couture, 2003; Dunn & Shapiro, 1999; Fulk, Brigham & Lohman, 1998; Olivier & Steenkamp, 2004; Pintrich et al., 1994). Cognitive deficits may result in difficulties to acquire fundamental academic skills, which in turn leads to low levels of motivation, a marked reluctance to take risks or make any new commitment in a learning situation and to task avoidance behaviour, creating a vicious circle which finally contributes to repeated academic failure (Sideridis, et al., 2006).

The issue of motivation in LD has been the focus of research from a range of conceptual frameworks such as self-efficacy, learned helplessness, attribution theory, goal orientation theory and approach to learning theory.

Self-efficacy as the beliefs in one's abilities to carry out a desired course of action means that people are likely to engage in activities to the degree that they perceive themselves to be competent at those activities (Bandura, 1997). Self-efficacy beliefs influence the level of effort and persistence expended on a task. According to the self-efficacy theory, low self-efficacy beliefs deteriorate performance, whereas high self-efficacy beliefs facilitate task engagement, effort, and performance (Pajares, 1996).

The majority of self-efficacy studies has demonstrated that individuals with LD have lower self-efficacy beliefs than their peers (e.g., Hampton & Mason, 2003; Pintrich, et al., 1994; Tabassam & Grainger, 2002). The strong association of self-efficacy and LD was confirmed in the results of five studies carried out by Sideridis and his colleagues (2006), showing that self-efficacy was a fair predictor of at-risk status for LD students. However, a growing number of researchers have proposed that in some cases, children with LD possess self-efficacy beliefs that are actually overestimates of their ability to carry out a future task (e.g., Fulk, et al., 1998; Klassen, 2002; Pintrich et al., 1994; Sawyer, Graham, & Harris, 1992; Lackaye, Margalit, Zin & Ziman, 2006). This is to say, that even the modest expressions of lower self-efficacy beliefs of students with LD are still overstatements of their subsequent academic performance, which may result in inadequate preparation for academic tasks, because accurate self-assessments are critical for students in order to take responsibility for their own learning.

Research regarding the attributions of children with LD showed that they are more likely to attribute their success to luck and their failure to lack of ability (Palladino et al., 2000). The meta-analysis of Mamlin, Harris and Case (2001), showed that students with LD had significantly high scores on external locus of control. In addition, they showed that children with reading disabilities, who hold a strong internal locus of control tend to have higher academic self-concepts as compared to those who perceived success and failure as outside their control. Although previous quantitative research has suggested that children with LD attribute their low academic performance to lack of ability (Ayres, Cooley, & Dunn, 1990; Frederickson & Jacobs, 2001; Humphrey & Mullins, 2002) or external factors (Lewis & Lawrence-Patterson, 1989; Ring & Reetz, 2000), the adolescents with LD in this study viewed their poor performance as internal, unstable, and controllable usually attributed to a lack of effort and persistence. External attributions are likely associated with poor motivational and achievement outcomes and may be linked to helplessness (Sideridis, 2009).

Students with LD may also manifest learned helplessness. Contrary to a temporary unmotivating state, learned helplessness is a chronic condition, where students demonstrate nearly complete apathy and persistent passivity. Learned helplessness refers to the expectation, grounded on previous experience, that an individual's

behaviour cannot possibly lead to success (Dweck, 1988). In other words, the perception of no relationship between a student's course of actions and reinforcement results in motivational withdrawal, which in turn may lead to disengagement and task withdrawal (Sideridis, 2009). Students with LD begin to assume that any learning task will prove too difficult and will result in failure, which eventually turns out to be a serious obstacle to future learning (Valas, 2001).

Repeated failures have a serious impact on children's motivational profiles concerning the time spent and the qualitative and quantitative effort demonstrated by students' with LD. Research evidence has shown that students with LD tend to persist for a shorter time and display less effort on a given task in a comparison with their peers (Cullen & Boersma, 1982; Sideridis, 2003). In a more recent study, Sideridis (2006b) demonstrated that students with LD engaged in an academic activity as much as their non-disabled peers, but they had lower performance as a result of the poor quality of their engagement with the given task.

According to the goal orientation framework (Dweck, 1988) there are two motivational patterns: the learning or mastery goal orientation and the performance or "helpless" goal orientation. Students hold mastery goals, when their goal is to deeply understand or master the given task for the joy of being engaged with the task, without expecting or hoping for external rewards. In contrast, a performance orientation is based on external sources of reinforcement (Harackiewicz & Elliott, 1998). Thus, individuals are involved with a task from the desire to outperform others, demonstrate their ability and maintain high levels of power. Performance-oriented individuals may approach a task to prove their competence and self-worth.

However, they may also approach a task with a focus on avoiding negative self-evaluations and are likely to avoid challenges, unless they are certain they can succeed. This latter pattern of task approach is grounded on fear of failure and has been termed performance–avoidance orientation (Elliot & Harackiewicz, 1996). Differences between performance–approach orientation and performance–avoidance have been so distinctive that a revision of goal orientation theory has been proposed (Harackiewicz, Barron, & Elliot, 1998; Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002), although other researchers have disagreed with this suggestion (Kaplan & Middleton, 2002; Midgley, Kaplan, & Middleton, 2001). It was hypothesised that a performance–approach orientation is linked with positive achievement outcomes and performance–avoidance orientation is associated with worry-related emotions, such as anxiety, when one fails to attain personal standards of success (Sideridis, 2007).

With regard to goals, students with LD on the whole have been reported to be more performance oriented and less mastery oriented (Sideridis, 2005; Vauras, Rauhanummi, Kinnunen, & Lepola, 1999). The lower scores on mastery goals have also been replicated by Botsas and Padeliadu (2003), who in addition, reported that students with reading disabilities were significantly more performance avoidant as compared to typical students. Students with LD tend to adopt an avoidance-performance orientation, which in turn leads to an image of helplessness (Kerr,

2001), avoidance of academic challenges, low levels of engagement with the task and a range of negative feelings (Elliott & Dweck, 1988). Sideridis and his colleagues (2006b) showed that goal orientation served as identifying characteristic of students already identified as experiencing LD and that it was a good predictor of LD, when students were motivated by mastery goals, but a poor predictor, when they were motivated by performance goals. However, Bouffard and Couture (2003) found that high achievers had higher levels of performance goals in comparison to students with LD but found no group differences regarding mastery goals, which was also reported by Lepola (2004) with younger students. Thus, the literature regarding the adoption of goal orientations by students with LD is, at most, inconclusive.

Motivational issues are also associated to students' learning approaches. Biggs (1987) and Entwistle (1987) categorized approaches to learning as deep and surface approaches. The deep approach is characterised by the intention to understand the material being studied, relating it to personally meaningful contexts or to existing prior knowledge, and implying internal motivation. Deep processing involves task enjoyment, deep engagement and challenge, which in turn leads to high-quality outcomes such as development of analytic skills and implies intrinsic motivation. On the other hand, the surface approach is characterised by the intention to reproduce the material being studied through routine procedures, because of the possible positive or negative consequences. Surface approaches are motivated by a desire to meet minimum requirements with minimum effort (Biggs, 1987). Surface motivated students focus on what appears to be the most important and beneficial for their performance and therefore, they are extrinsically motivated.

Results of recent studies support that children with LD hold a limited repertory of strategies, which usually include surface approaches associated with low levels of motivation (Polychroni et al., 2006; Poskiparta, Niemi, Lepola, Ahtola, & Laine, 2003; van Kraayenoord & Schneider, 1999). As reported above, students with LD tend to adopt an avoidance-performance orientation as a result of their fear of failure (Elliot & Harackiewicz, 1996) and anxiety (Sideridis, 2007), which have been found to be motives strongly associated with surface approach to learning (Diseth & Martinsen, 2003; Entwistle, 1988).

Interventions for psychosocial difficulties in learning disabilities: The issue of resilience.

While most LD research has been carried out on the deficit model that examined in depth the children's difficulties, causes and outcomes, during the last 20 years there is a move from deficit to empowering models of LD. This paradigm shift to strength models underlies the approach adopted across academic disciplines and the helping professions (Richardson, 2002). A growing number of researchers have

investigated the construct of resilience in the LD domain (Margalit, 2004; Miller, 2002; Raskind, Goldberg, Higgins & Herman, 1999; Wong, 2003). Resilience is conceptualised as the dynamic process of successful adaptation in the context of significant threats to development (Masten, Hubbard, Gest, Tellegen, Garmezy, & Ramirez, 1999). Implicit in this construct are a) exposure to a significant threat and b) individual variations in the response to adversity. Along this line of inquiry, the studies of resilience in LD used a cross-sectional or a longitudinal design with the aim of identifying single and cumulative risk and protective factors for children with LD. Applying the developmental framework of resiliency research to the conceptualization of LD, Wong (2003) proposed the following:

a) *The phenomenological wave* focused on the identification of the resilient children with LD attempting to answer the question "what are the factors that make children resilient to adversity?". In this context, in a longitudinal study where 72 children's cognitive and psychological development was tracked down at ages 1, 2, 10, 18, and 31/32, a subgroup of 22 children were diagnosed with LD at age 10 and then followed until the age of 31/32 (Werner & Smith, 1992). From the original group 18 adults at the age of 32 showed a turnaround from the downward trend. To explain this, they identified five clusters of protective factors, internal and external: The first cluster was the presence of a temperament that elicited positive reactions from parents, peers, teachers and spouses. The second cluster includes the values and skills that individuals may put to good use whatever natural talents they possessed, e.g. strong sense of self-efficacy and internal locus of control. The third cluster is the presence of parents who provided support, structure and emotional stability at home. The forth cluster is the presence of supportive adults, a mentor who acted as a gatekeeper for the future. The fifth cluster is the timely opportunities for individual with LD at critical life transition points.

Other studies have consistently documented that about 30 percent of children in different samples showed resiliency, in other words they had positive self-perceptions, were confident about their abilities, had high levels of self-efficacy, positive relationships with peers and did not report increased levels of loneliness (Margalit, 1994; Margalit & Al-Yagon, 2002; Riddick, Wolfe, & Lumsdon, 2002). In another study, among the predictors of success for the individuals with LD were "success attributes" such as self-awareness, perseverance, proactivity, emotional stability, goal setting, and social support (Raskind, et al., 1999). Difficulties in the social domain emerged also from qualitative research (Goldberg, Higgins, Raskind, & Herman, 2003). Cosden, Brown, & Elliott (2002) identified certain non academic strengths of the students with LD as protective factors, namely positive temperament, social behaviour, supportive and effective parents and self-understanding. As for risk factors, they identified peer acceptance and support and peer social comparisons. Moreover, Wiener (2002) has identified having more mutual friends and higher quality friendships.

b) *The wave of protective factors identification*. This second wave of research attempted to clarify how resilient qualities were acquired. Resilience in this research

describes how different individual differences and environmental characteristics such as family and school may lead to growth or failure (Morrison & Cosden, 1997) and the predictive risk and protective factors that contribute to positive outcome are studied (Wong, 2003).

c) *The conceptual wave.* The third theoretical wave emphasises the understanding of the experiences that foster activation and utilization of personal resources. It is suggested that when children realise the meaning of the disruption of goals and their role in the control of the environment, resilience is promoted. Within this developmental adaptation model, the research attempts to integrate proximal developmental influences with significant aspects of personal history (distal influences).

More comprehensive studies of protective factors are needed to provide a better understanding of the factors that predict resilient outcomes. The future challenge is to identify the complex and dynamic transactions and processes among internal and external factors for predicting children's success.

The conceptual framework of resilience and positive psychology has implications for the design and implementation of effective individual and school-wide intervention programmes with the goal of enhancing the social and emotional well-being of children. The primary intervention programmes addressing social difficulties of children in school settings in the recent years typically involve individual and small group social skills training. Social skills training programmes are comprehensive programmes that typically include systematic instruction in appropriate social skills, social problem solving, provide opportunities for students with LD and their NLD classmates to spend time together and dealing with feelings (Kavale & Mostert, 2004; Vaughn, Sinagab, & Kim, 2004). Specific social skills that may be taught are starting a conversation, asking a question, learning how to listen, expressing your feelings, apologising, working cooperatively, controlling anger e.t.c. Training procedures may include direct instruction, coaching, modelling, rehearsal, independently or in combination (Kavale & Mostert, 2004).

A number of evidence based interventions have been implemented with students with LD and high incidence disabilities (Gresham et al., 2001; Vaughn et al., 2004). The ASSET is addressed to adolescents (A Social Skills Program for Adolescents, Hazel, Schumaker, Sherman, & Sheldon-Wildgen, 1995) and is designed to teach adolescents the social skills they need to interact successfully with peers. The SCORE Skills (Social Skills for Cooperative Groups, Vernon, Schumaker, & Deshler, 1996) where students are taught social skills that have been shown to be foundational to all cooperative group activities such as sharing ideas, complimenting others, offering help or encouragement, and exercising self-control.

The Walker Social Skills Curriculum (Walker, McConnell, Holmes, Todis, Walker, & Golden, 1983) is addressed to adolescents, may be taught in one-to-one, small group and large group instruction formats and teaches peer-to-peer skills, skills for relating to adults, and self-management skills. The Interpersonal Problem-Solving

Intervention is a social strategy training program proposed by Vaughn and colleagues (Vaughn, McIntosh, Spencer-Row, 1991) addressed to rejected students with LD. The programme includes training in specific social skills with the help of "social skills trainers" in each participating class consisting of a rejected student with LD (identified with a school-wide sociometric assessment) and a highly popular NLD classmate.

It has to be noted that several meta-analyses and reviews of the social skills training literature have consistently indicated that social skills deficits appear to be rather resistant to change. Although social skills training interventions tend to produce some meaningful effects, these are typically modest in size, limited to certain types of social or behavioral outcomes, and usually not very long-term and consistent across settings (e.g., Beelman, Pfingsten, & Losel, 1994; Forness & Kavale, 1996; Gresham, et al., 2001; Kavale & Mostert, 2004). The nature of the training programmes, their intensity, and conceptual and measurement issues may account for this modest success. It is argued that social skills training studies that match social skills deficits with intervention strategies tend to produce more positive results.

An alternative evidence based intervention that has been found increasingly important for promoting social competence and positive peer relations within schools is social and emotional learning. This is implemented from a classwide and school-wide perspective corresponding to the universal level of the three-tiered approach to prevention and intervention (i.e. universal level, secondary level, tertiary level). This corresponds to an increasing body of research supports a "school reform" approach to social and emotional programming (Collaborative for Academic Social and Emotional Learning, SEAL, DCSF, 2007). Universal interventions are directed to all students (class and/or school) that have not been identified as a risk group. This level of intervention supports an environment that encourages prosocial behaviors, predictability, a positive school and classroom climate, and protective factors to prevent minor problems and difficulties from increasing in severity and students from becoming at risk for social and emotional problems (Zins, Weissberg, Wang, & Walberg, 2004).

It is supported that positive school environments not only enhance the social and emotional well-being of children, which is a primary goal of schooling, but maximize academic success for at risk children. A striking finding of risk and resilience studies is that many of the most powerful predictors of future children's competency were not individual characteristics of the children but characteristics of the communities in which children were raised (Doll, Zucker & Brehm, 2004). This represents a conceptual shift from the much widely used individual perspective to an interactive ecological perspective focused on the class context. Research is now directed to contextual considerations such as the quality of students' classroom, peer and school contexts. Empirical data has been provided for the characteristics of positive classrooms with an emphasis on relational characteristics, i.e., teacher-student relationships, peer relationships and

home-school relationships (Doll, et al., 2009). Research by Doll and her colleagues resulted in a measure of classroom environment (the ClassMaps Survey) which can be used to support problem-solving procedures in order to foster positive classroom environments.

Elias (2001) has strongly argued that social and emotional learning strategies have to be embedded in the schools. He also emphasised the impact of social and emotional competency on academic performance, "unless students are given strategies to regulate their emotions and direct their energies toward learning, it is unlikely that added instructional hours or days will eventuate in corresponding amounts of academic learning" (p. 131). According to Elias, the fundamental principles of social emotional learning (SEL) are that caring relationships provide the foundation for all lasting learning, that emotions affect how and what we learn and that goal setting and problem solving provide direction and energy for learning.

Within this framework, social emotional learning is the educational process of acquiring knowledge, skills, attitudes, and beliefs to: a) Recognize and manage emotions, b) Care about others, c) Make good decisions, d) Behave ethically and responsibly, e) Develop positive relationships and f) Avoid negative behaviors (Elias, Tobias, & Friedlander, 2002). Key skills that are taught in SEL programmes are, self awareness (e.g. recognizing own emotions), social awareness (e.g. empathy), responsibility decision making (personal responsibility), self-management (e.g. stress management) and relationship skills (e.g. working cooperatively). Evidence for SEL effectiveness demonstrated that SEL interventions enhanced competencies (e.g., assertiveness, communication skills, academic performance) and reduced internalizing and externalizing disorders, skill building, that environmental/ organizational change (i.e. school, class) were the most effective strategies, and in general these programmes are making a difference in well-evaluated studies.

Another example of a tool to promote social and emotional learning in school is Strong Kids (Merrell, Carrizales, Feuerborn, Gueldner, & Tran, 2007a; 2007b; 2007c). These companion programs are prevention or early intervention tools for internalising problems, promotion of social and emotional competence, and teaching students skills to increase their resilience to life stressors (Merrell, Gueldner & Tran, 2008). Nonetheless there is a need for better specified program goals and procedures, for structured manuals and curricula important to support consistency in delivery, for assessment of implementation quality, and for measures of long-term outcomes (Elias, et al., 2002).

In the UK, Social and Emotional Aspects of Learning (SEAL) is "a comprehensive, whole-school approach to promoting the social and emotional skills that underpin effective learning, positive behaviour, regular attendance, staff effectiveness and the emotional health and well-being of all who learn and work in schools" (DCSF, 2007, p.4). It was introduced in primary schools in 2005 and is currently being implemented in secondary schools (DfES, 2007). National Strategies report that it is currently being implemented in around 90% of primary schools and 70% of

secondary schools (Humphrey, Lendrum, & Wigelsworth, 2010). It is designed to promote the social and emotional skills that have been classified under the five domains proposed in Goleman's (1995) model of emotional intelligence, i.e., self-awareness, self-regulation, motivation, empathy, social skills. SEAL is implemented either as a Wave 1 intervention (equivalent to USA universal intervention) as a quality first teaching of social, emotional and behavioural skills to all children, as a Wave 2 intervention, i.e., small group intervention for children who need additional help in developing skills and as a Wave 3 individual intervention. Moreover, social, emotional and intellectual inclusion is a top priority in the "dyslexia friendly schools" scheme proposed by the British Dyslexia Association (BDA, 2007).

A recent meta-analysis of 213 school-based, universal social and emotional learning (SEL) programs in the USA involving 270,034 kindergarten through high school students showed that, as compared to controls, SEL students demonstrated significantly improved social and emotional skills, attitudes, behavior, and academic performance that reflected an 11-percentile-point gain in achievement (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). The findings add to the growing empirical evidence regarding the positive impact of SEL programs.

Conclusions

The empirical evidence linking socioemotional difficulties and LD is strong but the findings are far from conclusive. A number of methodological concerns have been raised regarding the studies on LD (Bear et al., 2002; Chapman, 1988; Mamlin, et al., 2001). Firstly, the heterogeneity of the dyslexic population, the variable identification criteria, and the presence of comorbidity make comparisons across studies difficult and generalization of the findings to the respective population almost impossible. Secondly, when low performance groups participated in the study, criteria for inclusion were variable, for example including the 25th percentile point as a cut-off score to differentiate children with LD from non-LD, or simply using teachers' ratings (Zeleke, 2004).

Moreover, it has been reported that self-ratings of academic self-concept and efficacy are exaggerated. For example, students with LD have unrealistically positive perceptions about themselves as compared with teachers' ratings (Kistner, Haskett, White, & Robbins, 1987) and overconfident as regards their ability for writing (Graham, Schwartz, & MacArthur, 1993). Similar measurement problems related to the self-reporting measurement of the research are raised by Wong (2003). Concomitant, more objective measures are called for to strengthen the data.

Identifying early and providing for dyslexia, organizing schools that are 'friendly' to pupils with dyslexia and promoting learning contexts that foster social-emotional well-being, self-esteem and motivation may lead to increased engagement in

reading and learning behaviours that are consistent with perceptions of the learning environment. Children's risk for later negative outcomes may be decreased with the implementation of targeted, structured social–emotional literacy interventions. The role of school psychologists is pivotal to this direction. In this chapter we argued that it is important not only to improve the social and emotional adjustment of children experiencing problems but also to enhance the development of all children.

References

Al-Yagon M., & Mikulincer M. (2004). Socio-emotional and academic adjustment among children with learning disorders: The mediational role of attachment based factors. *Journal of Special Education*, *38,* 11–123.

Arnold, E. M., Goldston, D. B., Walsh, A. K., Reboussin, B. A., Daniel, S. S., Hickman, E., & Wood, F. B. (2005). Severity of emotional and behavioral problems among poor and typical readers. *Journal of Abnormal Child Psychology*, *33*, 205-217.

Ayres, R., Cooley, E., & Dunn, C. (1990). Self-concept, attribution, and persistence in learning disabled students. *Journal of School Psychology, 28,* 153–163.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Bear, G. G., Minke, K. M., & Manning, M. A. (2002). The self-concepts of students with learning disabilities: A meta-analysis. *School Psychology Review*, *31*, 405–427.

Beelman, A., Pfingsten, U., & Lösel, F. (1994). Effects of training social competence in children: A meta-analysis of recent evaluation studies. *Journal of Clinical Child Psychology, 23,* 260−271.

Bender, W., & Wall, M. E. (1994). Social-emotional development of students with learning disabilities. *Learning Disability Quarterly, 17*, 323–41.

Berndt, T.J. (1999). Friends' influence on students' adjustment to school. *Educational Psychologist, 34*, 15–28.

Biggs, J. (1987). *Student approaches to learning and studying*. Camberwell, Vic.: Australian Council for Educational Research.

Botsas, G., & Padeliadu, S. (2003). Goal orientation and reading comprehension strategy use among students with and without reading difficulties. *International Journal of Educational Research*, *39*, 477–495.

Bouffard, T., & Couture, N. (2003). Motivational profile and academic achievement among students enrolled in different schooling tracks. *Educational Studies, 29,* 19–38.

Bowers, T. (2005) The forgotten 'E' in 'EBD'. In P. Clough, P. Garner, J. T. Pardeck, & F. Yuen (Eds.), *Handbook of emotional and behavioural difficulties*, (pp. 83–102). London: Sage.

British Dyslexia Association, BDA (2005). *Dyslexia-friendly schools and classes.* Reading: BDA.

Bryan, T. (1998).Social competence of students with learning disabilities. In B. Y. L. Wong (Ed.), *Learning about learning disabilities* (2nd ed., pp. 237-267). San Diego, CA: Academic Press.

Bryan, T., Burstein, K., & Ergul, C. (2004). The social-emotional side of learning disabilities: A science-based presentation of the state of the art. *Learning Disability Quarterly*, *27*,

45–51.
Burden, R. (2008). Is dyslexia necessarily associated with negative feelings of self-worth? A review and implications for future research. *Dyslexia*, *14*, 188-196.
Cairns, R. B., Cairns, B. D., & Neckerman, H. J. (1989). Early school drop out-Configurations and determinants. *Child Development, 60*, 1437–1452.
Carroll, J. M., & Iles, J.E. (2006). An assessment of anxiety levels in dyslexic students in higher education. *British Journal of Educational Psychology*, *76*, 651-662.
Carroll, J. M., Maughan, B., Goodman, R. F., & Meltzer, H. (2005). Literacy difficulties and psychiatric disorders: Evidence for comorbidity. *Journal of Child Psychology and Psychiatry*, *46*, 524–532.
Casey, R., Levy, S. E., Brown, K., & Brooks-Gunn, J. (1992). Impaired emotional health in children with mild reading disability. *Journal of Developmental and Behavioral Pediatrics, 13*, 256-260.
Chapman, J. W. (1988). Learning disabled children's self-concepts. *Review of Educational Research, 58,* 347–371.
Chapman, J. W., Tunmer, W. E., Prochnow, J. E. (2004). Repressed resilience? A longitudinal study of reading, self-perceptions, and teacher behavior ratings of poor and average readers in New Zealand. *Thalamus*, *22*, 9-15.
Cooper, D. H., & Farran, D. C. (1991). *The Cooper-Farran Behavioral Rating Scales.* Brandon, VT: Clinical Psychology Publishing Co., Inc.
Cosden, M. A., & McNamara, J. (1997).Self-concept and perceived social support among college students with and without learning disabilities. *Learning Disability Quarterly, 20,* 2–12.
Cosden, M., Brown, C., & Elliott, K. (2002). Development of self understanding and self-esteem in children and adults with learning disabilities. In B. Y. L. Wong & M. Donahue (Eds.), *Social dimensions of learning disabilities* (pp. 33–51). Mahwah, NJ: Erlbaum.
Cullen, J. L. & Boersma, F. J. (1982). The influence of coping strategies on the manifestation of learned helplessness. *Contemporary Educational Psychology*, *7*, 346-356.
Department for Children, Schools and Families (2007). *Social and emotional aspects of learning for secondary schools.* Nottingham: DCSF Publications.
Department for Education and Skills (2007). *Social and emotional aspects of learning (SEAL) for secondary schools: guidance booklet.* Nottingham: DfES Publications.
DeRosier, M. E., & Lloyd, S. W. (2011). The impact of children's social adjustment on academic outcomes. *Reading and Writing Quarterly, 27*, 25-47.
Diseth, A., & Martinsen, O. (2003). Approaches to learning, cognitive style, and motives as predictors of academic achievement. *Educational Psychology, 23,* 195-207.
Doll, B. (1996). Children without friends: Implications for practice and policy. *School Psychology Review*, *25*, 165–183.
Doll, B., Zucker, S., & Brehm, K. (2004.) *Resilient classrooms: Creating healthy environments for learning*. New York: Guilford Publications.
Dunn, P. B., & Shapiro, S. K. (1999). Gender differences in the achievement goal orientation of ADHD children. *Cognitive Therapy and Research, 23,* 327-344.
Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D. and Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*, 405–432.
Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of*

Personality and Social Psychology, 54, 5–12.
Edwards, J. (1994). *The scars of dyslexia: Eight case studies in emotional reactions*. London: Cassell.
Elbaum, B. (2002). The self-concept of students with learning disabilities: A meta-analysis of comparisons across different placements. *Learning Disabilities Research and Practice*, *17*, 216-226.
Elbaum, B., & Vaughn. S. (2003). For which students with learning disabilities are self-concept interventions effective? *Journal of Learning Disabilities, 36,* 101-108.
Elias, M. J., Tobias, S. E., & Friedlander, B. S. (2002). *Raising emotionally intelligent teenagers.* New York: Three Rivers Press/Random House.
Elias, M. L. (2001). Strategies to infuse social and emotional learning into academics. In J. E. Zins, R. P. Weissberg, M. C. Wang, & H. L. Walberg (Eds.), *Building academic success on social and emotional learning* (pp. 131-13a). New York Teachers College Press.
Elksnin, L. K., & Elksnin, N. (2004). The social-emotional side of learning disabilities. *Learning Disability Quarterly*, *27*, 3–8.
Elliott, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology*, *54*, 5-12.
Elliott, E. S., & Harackiewicz, J. M. (1996). Approach and avoidance achievement goals and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology*, *70*, 461-475.
Entwistle, N. J. (1988). Motivational factors in students' approaches to learning. In R. R. Schmeck (Ed.), *Learning strategies and learning styles* (pp. 21-51). New York: Plenum.
Eysenck, M. W., Derakshan, N., Santos, R., & Calvo, M. G. (2007). Anxiety and cognitive performance: Attentional controltheory. *Emotion*, *7*, 336–353.
Fontana, D. (1995). *Psychology for teachers (psychology for professional groups*). London: Palgrave Macmillan.
Forness, S. R., & Kavale, K. A. (1991). Social skills deficits as a primary learning disability: A note on problems with the ICLD diagnostic criteria. *Learning Disabilities Research and Practice*, *6*, 44-49.
Forness, S. R., & Kavale, K. A. (1996). Treating social skill deficits in children with learning disabilities: A meta-analysis of the research. *Learning Disability Quarterly, 19*, 2-14.
Frederickson N., & Jacobs, S. (2001). Controllability attributions for academic performance and the perceived scholastic competence, global self-worth and achievement of children with dyslexia. *School Psychology International*, *22***,** 127-142.
Fulk, B. M., Brigham, F. J., & Lohman, D. A. (1998). Motivation and self-regulation: A comparison of students with learning and behavior problems. *Remedial and Special Education, 19,* 300–309.
Gadeyne, E., Ghesquiere, P. & Onghena, P. (2004). Psychosocial functioning of young children with learning problems. *Journal of Child Psychology and Psychiatry, 45*, 510-521.
Gage, N., & Berliner, D. (1998). *Educational psychology* (6th ed.). Boston: Houghton Mifflin.
Gans, A. M., Kenny, M. C., & Ghany, D. L. (2003). Comparing the self-concept of students with and without learning disabilities. *Journal of Learning Disabilities, 36,* 287–295.
Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). *Life success for children with learning disabilities: A parent guide*. Pasadena, CA: The Frostig Center.
Goleman, D. P. (1995). *Emotional Intelligence: Why it can matter more than IQ for character,*

health and lifelong achievement. Bantam Books, New York.
Graham, S., Schwartz, S. S., & MacArthur, C. A. (1993). Knowledge of writing and the composing process, attitude toward writing, and self-efficacy for students with and without learning disabilities. *Journal of Learning Disabilities, 26*, 237-249.
Gresham, F.M. (1998). Social skills training: Should we raze, remodel, or rebuild? *Behavioral Disorders, 24,* 19-25.
Gresham, F.M. (2001). Assessment of social skills in students with emotional and behavioral disorders. *Assessment of Effective Intervention, 26,* 51-58.
Gresham, F.M., Sugai, G., & Horner, R. (2001). Interpreting outcomes of social skills training for students with high-incidence disabilities. *Exceptional Children, 67,* 331-344.
Grolnick, W. S., & Ryan, R. M. (1990). Self-perceptions, motivation, and adjustment in learning disabled children: A multiple group comparison study. *Journal of Learning Disabilities, 23,* 177-184.
Guay, F., Boivin, M., & Hodges, E. V. E. (1999). Predicting change in academic achievement: A model of peer experiences and self-system processes. *Journal of Educational Psychology*, *91*, 105–115.
Hampton, N. Z., & Mason, E. (2003). Learning disabilities, gender, sources of efficacy, self-efficacy beliefs, and academic achievement in high school students. *Journal of School Psychology, 41,* 101–112.
Harackiewicz, J. M., & Elliot, A. J. (1998). The joint effects of target and purpose goals on intrinsic motivation: A mediational analysis. *Personality and Social Psychology Bulletin, 24,* 675–691.
Harackiewicz, J. M., Barron, K. E., & Elliot, A. J. (1998). Rethinking achievement goals: When are they adaptive for college students and why? *Educational Psychologist, 33,* 1–21.
Harackiewicz, J. M., Barron, K. E., Pintrich, P. R., Elliot, A. J., & Thrash, T. M. (2002). Revision of achievement goal theory: Necessary and illuminating. *Journal of Educational Psychology, 94,* 638–645.
Harter, S. (1999).*The construction of the self: A developmental perspective*. New York: Guilford Press.
Hatzichristou, C., Polychroni, F., Besevegis, E., & Mylonas, K. (2008). *Test of psychosocial adjustment for preschool and elementary school students* (in Greek). Ministry of Education: OP Project.
Hawkins J., & Lishner, D. (1987). Schooling and delinquency. In E. Johnson (Ed.), *Handbook on crime and delinquency prevention (*pp.179-221). New York: Greenwood Press.
Hazel, J. S., Schumaker, J. B., Sherman, J. A., & Sheldon-Wildgen, J., (1995). ASSET: *A social skills program for adolescents.* Champaign, IL: Research Press.
Heath, N., & Wiener, J. (1996). Depression and nonacademic self-perceptions in children with and without learning disabilities. *Learning Disabilities Quarterly*, *9,* 34-44.
Humphrey, N. (2002). Teacher and pupil ratings of self-esteem in developmental dyslexia. *British Journal of Special Education, 29,* 29– 36.
Humphrey, N., & Mullins, P. (2002a). Self-concept and self-esteem in developmental dyslexia.*Journal of Research in Special Educational Needs*, *2*, 3-15.
Humphrey, N., & Mullins, P. (2002b). Personal constructs and attribution for academic success and failure in dyslexia. *British Journal of Special Education*, *29*, 196-201.
Humphrey, N., Lendrum, A., & Wigelsworth, M. (2010). *Secondary social and emotional*

aspects of learning (SEAL): National evaluation. Nottingham: Department for Education.
Ingesson, S. G. (2007). Growing up with dyslexia. *School Psychology International*, *28*, 574-591.
Jones, R. S. P., & Heskin K. J., (2010). Self- concept and learning disability: An experimental analysis. *Insights on Learning Disability, 7*, 49-55.
Kaplan, A., & Middleton, M. J. (2002). Should childhood be a journey or a race? A response to Harackiewicz et al. (2002). *Journal of Educational Psychology, 94,* 646–648.
Kavale, K. A., & Forness, S. R. (1996). Social skill deficits and learning disabilities: A meta-analysis. *Journal of Learning Disabilities*, *29*, 226-237.
Kavale, K. A., & Mostert, M. P. (2004). Social skills interventions for individuals with learning disabilities. *Learning Disability Quarterly*, *27*, 31-43.
Kerr, H. (2001). Learned helplessness and dyslexia: A carts and horses issue? *Reading, Literacy and Language, 35*, 82 – 85.
Kistner, J., Haskett, M., White, K., & Robbins, F. (1987). Perceived competence and self-worth of LD and normally achieving students. *Learning Disabilities Quarterly, 10*, 37-44.
Klassen, R. M. (2002). A question of calibration: A review of the self-efficacy beliefs of students with learning disabilities. *Learning Disability Quarterly, 25,* 88–103.
Kupersmidt, J. B., & DeRosier, M. E. (2004). How peer problems lead to negative outcomes: An integrative mediational model. In K. A. Dodge & J. B. Kupersmidt (Eds.), *Children's peer relations: From development to intervention* (pp. 119–138). Washington, DC: American Psychological Association.
Lackaye, T., Margalit, M., Ziv, O., & Ziman, T. (2006), Comparisons of self-efficacy, mood, effort, and hope between students with learning disabilities and their non-LD-matched peers. *Learning Disabilities Research and Practice*, *21*, 111–121.
Ladd, G. W., Kochenderfer, B. J., & Coleman, C. C. (1996). Friendship quality as a predictor of young children's early school adjustment. *Child Development*, *67*, 1103-1118.
LaGreca, A. M., & Stone, W. L. (1990). Children with learning disabilities: The role of achievement in the social, personal, and behavioral functioning. In H. L. Swanson & B. K. Keogh (Eds.), *Learning disabilities: Theoretical and research issues* (p.p. 333-352). Hillsdale, NJ: Erlaub.
Lepola, J. (2004). The role of gender and reading competence in the development of motivational orientations from kindergarten to grade 1. *Early Education and Development*, *15*, 217–242.
Lewis, S. K., & Lawrence-Patterson, E. (1989). Locus of control of children with learning disabilities and perceived locus of control of significant others. *Journal of Learning Disabilities, 22,* 255–257.
Licht, B. G., & Kirstner, J. A. (1986). Motivational problems of learning-disabled children: Individual differences and their implications for treatment. In J. K. Torgesen & B. Y. L. Wong (Eds.), *Psychological and educational perspectives on learning disabilities* (pp. 225–255). New York: Harcourt Brace Jovanovich.
Lindsay, G., Dockrell, J. (2000). The behaviour and self-esteem of children with specific speech and language difficulties. *British Journal of Educational Psychology, 70*, 583- 601.
Maag, J. W., & Reid, R. (2006). Depression among students with learning disabilities: Assessing the risk. *Journal of Learning Disabilities, 39,* 3–10.
Malecki, C. K., & Elliott, S. N. (2002). Children's social behaviors as predictors of academia achievement: A longitudinal analysis. *School Psychology Quarterly*, *17*, 1–23.

Mamlin, N., Harris, K., & Case, L. (2001).A methodological analysis of research on locus of control and learning disabilities. *Journal of Special Education, 34, 214-225.*

Margalit, M. (1994). *Loneliness among children with special needs: Theory, research, coping and intervention*. New York: Springer-Verlag.

Margalit, M. (2004). *Second-generation research on resilience: Social-emotional aspects of children with learning disabilities. Learning Disabilities Research and Practice, 19*, 45-48.

Margalit, M., & Levin-Al-Yagon, M. (1994). Learning disability subtyping, loneliness and classroom adjustment.*Learning Disability Quarterly*, *17*, 297-310.

Margalit, M., & Al-Yagon, M. (2002). The loneliness experience of children with learning disabilities. In B. Y. L. Wong & M. Donahue (Eds.), *Social dimensions of learning disabilities* (pp. 53–75). Mahwah, NJ: Lawrence Erlbaum Associates.

Masi, G., Brovedani, P., & Poli, P. (1998). School failure in early adolescence: The psychopathological risk. *Child Psychiatry and Human Development, 29,* 127–140.

Masten, A. S., Hubbard, J. J., Gest, S. D., Tellegen, A., Garmezy, N., & Ramirez, M. (1999). Competence in the context of adversity: Pathways to resilience and maladaptation from childhood to late adolescence. *Development and Psychopathology*, *11*, 143–169.

Meadan, H., & Halle, J.W. (2004). Social perceptions of students with learning disabilities who differ in social status. *Learning Disabilities Research and Practice, 19*, 71-82.

Merrell, K. M., Gueldner, B. A., & Tran, O. K. (2008). Social and emotional learning: A school-wide approach to intervention for socialization, friendship problems, and more. In B. J. Doll & J. A. Cummings (Eds.), *Population-based services of school psychologists* (pp. 165–185). Bethesda, MD: National Association of School Psychologists.

Merrell, K. W., Carrizales, D., Feuerbom, L., Cueldner, B., & Trary, O. (2007a). *Strong kids-grades 3-5: A social and emotional learning curriculum for use with elementary-age students.* Baltimore: Paul H. Brookes Publishing.

Merrell, K. W., Carrizales, D., Feuerborn, L., Gueldner, B., & Tran, O. (2007b). *Strong kids-grades 6-8: A social and emotional learning curriculum for use with middles school students.* Baltimore: Paul H. Brookes Publishing.

Merrell, K. W., Carcizales, D., Feuerborn, L., Gueldner, B., & Tran, O. (2007c). *Strong teens: A social and emotional learning curriculum for use with high school students.* Baltimore: Paul H. Brookes Publishing.

Midgley, C., Kaplan, A., & Middleton, M. (2001). Performance-approach goals: Good for what, for whom, under what circumstances, and at what cost? *Journal of Educational Psychology*, *93*, 77-86.

Miller, M. (2002). Resilience elements in students with learning disabilities. *Journal of Clinical Psychology, 58,* 291–298.

Morrison, G., & Cosden, M. (1997). Risk, resilience and adjustment of individuals with learning disabilities. *Learning Disability Quarterly, 20,* 43-60.

Nelson, M. J., & Harwood, H. (2011). Learning disabilities and anxiety: A meta-analysis. *Journal of Learning Disabilities*, *44*, 3-17.

Nolen-Hoeksema, S., Girgus, J. S., & Seligman, M. E. P. (1992). Predictors and consequences of childhood depressive symptoms: A5-year longitudinal study. *Journal of Abnormal Psychology, 101,* 405–422.

Olivier, M. A. J., & Steenkamp, D. S. (2004). Attention-deficit/hyperactivity disorder: Underlying deficits in achievement motivation. *International Journal for the Advancement*

of Counselling, 26, 47–63.
Pajares, F. (1996). Self-efficacy beliefs in academic settings.*Review of Educational Research, 66,* 543–578.
Palladino, P., Poli, P., Masi, G., & Marcheschi, M. (2000). The relation between metacognition and depressive symptoms in preadolescents with learning disabilities: Data in support of Borkowski's model. *Learning Disabilities Research and Practice, 15*, 142–149.
Parker, J., Rubin, K., Price, J., & de Rosier, M. (1995). Peer relationships, child development, and adjustment. In D. Cicchetti & D. Cohen (Eds.), *Developmental psychopathology: Vol 2. Risk, disorder, and adaptation* (pp. 96–161). New York: Wiley.
Petrides, K. V., Sangareau, Y., Furnham, A., & Frederickson, N. (2006). Trait emotional intelligence and children's peer relations at school. *Social Development, 15,* 537–547.
Pintrich, P. R., Anderman, E. M., & Klobucar, C. (1994). Intraindividual differences in motivation and cognition in students with and without learning disabilities. *Journal of Learning Disabilities, 27,* 360–370.
Polychroni, F., Hatzichristou, C., Besevegis, E., & Mylonas, K. (2009). *Social, emotional and school adjustment of children with learning disabilities: teacher ratings*. Paper presented at the 12th Conference of the Hellenic Psychological Society, Volos, 15-19 May.
Polychroni, F., Koukoura, K., & Anagnostou, I. (2006). Academic self concept, reading attitudes and approaches to learning of children with dyslexia. Do they differ from their peers? *European Journal of Special Education, 21*, 415-430.
Poskiparta, E., Niemi, P., Lepola, J., Ahtola, A., & Laine, P. (2003). Motivational-emotional vulnerability and difficulties in learning to read and spell. *British Journal of Educational Psychology, 73*, 187–206.
Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research and Practice, 14,* 35-49.
Richardson, G. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology, 58*, 307-321.
Riddick, B., Sterling, C., Farmer, M., & Morgan, S. (1999) Self-esteem and anxiety in the educational histories of adult dyslexic students, *Dyslexia,* 5, 227–248.
Riddick, B., Wolfe, J., & Lumsdon, D. (2002). *Dyslexia: A practical guide for teachers and parents*. London: David Fulton.
Ring, M., & Reetz, L. (2000). Modification effects on attributions of middle school students with learning disabilities. *Learning Disabilities Research and Practice, 15*, 35-43.
Saarni, C. (2000). Emotional competence. A development perspective. In R. Bar-On & J. Parker (Eds.), *Handbook of emotional intelligence* (pp. 68-91). San Francisco, CA: Jossey-Bass.
Schutz, P. A., & Lanehart, S. L. (2002). Introduction: Emotions in education. *Educational Psychologist*, *37*, 2, 67–68 (Special issue: Emotions in Education).
Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976) Self-concept: Validation of construct interpretations. *Review of Educational Research, 46*, 407–437.
Sideridis, G. D. (2003). On the origins of helpless behavior of students with learning disabilities: Avoidance motivation? *International Journal of Educational Research*, *39*, 497-517.
Sideridis, G. D. (2005). Goal orientations, classroom goal structures, academic achievement, and regulation in learning disabilities. In G. D. Sideridis & T. A.

Citro (Eds.), *Research to practice: Effective interventions in learning disabilities* (pp. 193-219. Boston: LDW.

Sideridis, G. D. (2006a). Understanding low achievement and depression in children with learning disabilities: A goal orientation approach. *International Review of Research in Mental Retardation, 31,* 163–203.

Sideridis, G. D. (2006b). Goal orientations and strong oughts: Adaptive or maladaptive forms of motivation for students with and without suspected learning disabilities? *Learning and Individual Differences*, *16*, 61-77.

Sideridis, G. D. (2007). Why are students with LD depressed? : A goal orientation model of depression vulnerability. *Journal of Learning Disabilities*, *40*, 526-539.

Sideridis, G. D. (2009). Motivation and learning disabilities: Past, present, and future. In K. R. Wentzel & A. Wigfield (Eds.), *Handbook of motivation at school* (pp. 605-625). New York- London: Routledge.

Sideridis, G. D., Morgan, P., Botsas, G., Padeliadu, S., & Fuchs, D. (2006). Predicting LD on the basis of motivation, metacognition, and psychopathology: An ROC analysis. *Journal of Learning Disabilities, 39,* 215-229.

Sideridis, G. D., Mouzaki, A., Simos, P., & Protopapas, A. (2006). Classification of students with reading comprehension difficulties: The roles of motivation, affect and psychopathology. *Learning Disability Quarterly, 29*, 159 – 180.

Stone, C. A. (2004). The role of social support and congruency of perspectives in moderating threats to self-concept in high-functioning adolescents with learning disabilities. A preliminary report. *Thalamus, 22,*40–49.

Tabassam, W., & Grainger, J. (2002). Self-concept, attributional style and self-efficacy beliefs of students with learning disabilities with and without attention deficit hyperactivity disorder. *Learning Disability Quarterly, 25,* 141–151.

Terras, M. M., Thompson, L. C., & Minnis, H. (2009). Dyslexia and psycho-social functioning: An exploratory study of the role of self-esteem and understanding. *Dyslexia, 15,* 304–27.

Tur-Kaspa, H. (2002). Social cognition in learning disabilities. In B. Y. L. Wong & M. Donahue (Eds.), *The social dimensions of learning disabilities* (pp. 11-31). Mahwah, NJ: Erlbaum.

Tur-Kaspa, H., & Bryan, T. (1995).Teachers' ratings of the social competence and social adjustment of students with LD in elementary and junior high school. *Journal of Learning Disabilities*, *28*, 44-52.

Valas, H. (2001). Learned helplessness and psychological adjustment: Effects of learning disabilities and low achievement. *Scandinavian Journal of Educational Research, 45,* 101–114.

Van Ameringen, M., Mancini, C., & Farvolden, P. (2003). The impact of anxiety disorders on educational achievement. *Journal of Anxiety Disorders*, *17*, 561–571.

Van Kraayenoord, C. E. & Schneider, W. E. (1999). Reading achievement, metacognition, reading self – concept and interest: A study of German students in grades 3 and 4. *European Journal of Psychology of Education, 14*, 305 – 324.

Vaughn, S., Elbaum, B., & Boardman, A. (2001). The social functioning of students with learning disabilities: Implications for inclusion. *Exceptionality*, *9*, 47-65.

Vaughn, S., & Hogan, A. (1990). Social competence and learning disabilities: A prospective study. In H. L. Swanson, & B. K. Keogh (Eds.), *Learning disabilities: Theoretical and research issues* (pp. 175-191). Hillsdale, NJ: Erlbaum.

Vaughn, S., & Haager, D. (1994). Social competence as a multifaceted construct: How do students with learning disabilities fare? *Learning Disability Quarterly*, *17*, 253-266.

Vaughn, S., & Sinagub, J., & Kim, A. (2004). Social competence of students with learning disabilities: Interventions and issues. In B. Y. L. Wong (Ed.), *Learning about learning disabilities* (pp. 453–487). Orlando, FL: Academic.

Vaughn, S., Elbaum, B. E., Schumm, J. S., & Hughes, M. T. (1998). Social outcomes for students with and without learning disabilities in inclusive classrooms. *Journal of Learning Disabilities*, *31*, 428–436.

Vaughn, S., Haager, D., Hogan, A., & Kouzekanani, K. (1992). Self-concept and peer acceptance in students with learning disabilities: A four to five year prospective study. *Journal of Educational Psychology, 84*, 1, 43-50.

Vaughn, S., Hogan, A., Kouzekanani, K., & Shapiro, S. (1990). Peer acceptance, self-perceptions, and social skills of learning disabled students prior to identification. *Journal of Educational Psychology, 82,* 101-106.

Vaughn, S. R., McIntosh, R. M., & Spencer-Rowe, J. (1991). Peer rejection is a stubborn thing: Increasing peer acceptance of rejected students with learning disabilities. *Learning Disabilities Research and Practice, 6,* 83-88.

Vauras, M., Rauhanummi, T., Kinnunen, R., & Lepola, J. (1999). Motivational vulnerability as a challenge for educational interventions. *International Journal of Educational Research*, *31*, 515–531.

Vernon, D. S., Schumaker, J. B., & Deshler, D. D. (1996). *SCORE skills: Social skills for cooperative groups (Instructor's Manual).* Edge Enterprises, Inc.

Vogel, S. A., & Forness, S. R. (1992). Social functioning in adults with learning disabilities. *School Psychology Review*, *21*, 375-386.

Walker, H., McConnell, S., Holmes, D., Todis, B., Walker, J., & Golden, N. (1983). *The walker social skills curriculum: The ACCEPTS program (a curriculum for children's effective peer and teacher skills)*. Austin, TX: Pro-Ed.

Watkins, M. W. (1996). Diagnostic utility of the WISC-III developmental index as a predictor of learning disabilities. *Journal of Learning Disabilities*, *29*, 305-312.

Webber, L. S., Owens, J., Charlton, J. L., & Kershaw, M. M. (2002). Case studies in learning disabilities: Implications for instruction. *Australian Journal of Learning Disabilities, 7,* 28–33.

Werner, E., & Smith, R. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Ithaca, NY: Cornell University Press.

Westwood, P. (2008). *What teachers need to know about learning difficulties*. Camberwell: Acer Press.

Wiener, J. (2002). Friendship and social adjustment of children with learning disabilities. In B. Y. L. Wong & M. Donahue (Eds.), *Social dimensions of learning disabilities* (pp. 93–114). Mahwah, NJ: Erlbaum.

Wiener, J. (2004). Do peer relationships foster behavioral adjustment in children with learning disabilities. *Learning Disabilities Quarterly, 27*, 21-30.

Wiener, J. R., & Schneider, B. H. (2002). A multi-source exploration of the friendship patterns of children with and without learning disabilities. *Journal of Abnormal Child Psychology, 30*, 127-141.

Wigfield, A. (1997). Reading motivation: A domain-specific approach to motivation. *Educational Psychologist, 32,* 59–68.

Williams, S., & McGee, R. (1994). Reading attainment and juvenile delinquency. *Journal of Child Psychology and Psychiatry, 35,* 442–459.

Wong, B. Y. L. (2003). General and specific issues for researchers' consideration in applying the risk and resilience framework to the social domain of learning disabilities. *Learning Disabilities Research and Practice*, *18*, 68–76.

Zeleke, S. (2004). Self-concepts of students with learning disabilities and their normally achieving peers: A review. *European Journal of Special Needs Education*, *19*, 145–170.

Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (2004). *Building school success through social and emotional learning*. New York, NY: Teachers College Press.

This book is an ambitious project uniting various fields in a multidisciplinary venture drawing on academics and clinicians from medicine, psychology and educational sciences. The interdisciplinary approach has assembled medical, educational and health specialists with scholarly contributions from many different countries and institutes.

A plethora of scientific studies have shown that in order for children to maintain good health, both physically and psychologically, families, teachers, physicians and psychologists have to work closely together. Few scientific books address the wide spectrum of challenges required to resolve such developmental issues: for example, when families migrate to unfamiliar countries, the influence of grandparents in childrearing practises, impact of having a disabled children on family structures and social interactions, socio-economic factors which impose limits on healthy growth, and families which have to cope with debilitating emotional crises whether originating from the parents or their offspring. This collection of essays is an attempt to bridge theoretical and research concepts and findings with clinical practise, adopting an interdisciplinary and cross-cultural perspective. It reveals determinants and other factors which are implicated in the effectiveness of health promotion and therapeutic interventions, as well as identifying reliable diagnostic and health programs and / or enhance learning and teaching programmes.

ISBN 978-960-9541-94-7