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Discussion Paper

Social and emotional learning for children with Learning Disability: Implications for inclusion.

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This paper discusses the key role of social and emotional learning programmes for children with Learning Disability (LD). The first part of the paper discusses the difficulties students with learning disability may encounter in their education, such as issues related to peer group acceptance, friendship and social isolation, low self-efficacy and self-esteem, and externalized and internalized behavior problems. The relationship between social and emotional learning programmes and learning disability is then discussed, underlining the benefits of social and emotional learning for students with LD. The paper concludes by highlighting the need for universal social and emotional learning as a vehicle for the academic and social inclusion of students with LD.

Keywords: Social and emotional learning, learning disability, inclusion, universal intervention

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Introduction

Students with Learning Disability (LD) are identified through difficulties in academic work, mainly reading, writing, and/or calculation difficulties (also called Specific Learning Difficulties or Specific Learning Disorder (American Psychiatric Association, 2013). Consequently, the usual emphasis of intervention for these students has mainly focused on the development of effective programmes to support learning processes, targeting the areas of reading, writing or counting, with little attention to the emotional and social aspects.

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However, school problems encountered by students with LD are not limited to areas that only related to learning processes, such as attention and memory. Various studies have highlighted a number of issues related to the emotional and social aspects of education of children with LD (Butler & Silliman, 2008; Elias, 2004; Schiff & Joshi, 2016). According to the DSM-5 (American Psychiatric Association, 2013) "Specific learning disorders can have negative functional consequences across the lifespan, including [...] high levels of psychological distress and poorer overall mental health. School dropout and co-occurring depressive symptoms increase the risk for poor mental health outcomes, including suicidality" (p. 73). This paper discusses the influence of LD on the emotional and social development of children at school and argues on the importance of increasing school-based SEL programmes to promote the social and emotional development of such students

Social, emotional and behavior challenges for students with LD

Rejection, isolation, and peer pressure

Bryan's first studies (Bryan, 1974a; 1974b; 1976) and following research described the sociometric status of children with LD as one characterized by isolation and social rejection across time (Kavale & Forness, 1996; Magalit & Al-Yagon; 2002; Ochoa & Olivarez, 1995; Swanson & Malone, 1992; Tur-Kaspa, 1999). Children who are less chosen by peers at school, have fewer opportunities to interact and build friendships and tend to experience frequent states of loneliness (Mugnaini, Lassi, La Malfa & Albertini, 2009; Pearl et al., 1998), showing poor prosocial behaviour and emotional distress (Wentzel, Barry, & Caldwell, 2004). Conversely, having positive relationships with classroom peers leads to a better psychological adjustment (Bagwell, Newcomb, & Bukowski, 1998; Schneider, Wiener, & Murphy, 1994).

Other studies pointed out that, although some students with LD may be able to easily join social groups, these groups are more frequently characterized by behavioural problems and lower levels of prosocial behaviour. Furthermore, adolescents with LD tend to show more willingness to conform to negative peer pressure to engage in risk-behaviours (e.g., substance and alcohol abuse, unprotected sexual activity, delinquency and gambling) to avoid social isolation and to support friends' requests and wishes (Bryan, Werner, & Pearl, 1982; Bryan, Pearl, & Fallon, 1989). These behaviours are considered as an effective way to be accepted by peers (McNamara, Vervaeke, & Willoughby, 2008). Isolation, conflict, and difficulties in creating and maintaining social relationships (Bakker, Denessen, Bosman, Krijgert, & Bouts, 2007; Valås, 1999; Yu, Zhang, & Yan, 2005) can lead students to build friendships with those who are rejected by peers such as students with behavioural problems, with similar learning difficulties or younger children (Wiener, 2002; Wiener & Schneider, 2002). This may represent an additional obstacle to the development of social competence, turning away children with LD from the mainstream peer group.

Low Self-efficacy and self-esteem

Research has indicated that the self-efficacy and self-esteem of children with LD may be negatively influenced by classroom isolation, by the difficulties of dealing with school demands and by repeated experiences of school failure (Zeleke, 2004). Children with LD tend to compare their performance with that

of their peers and consider themselves different, less valued and less skilled (Gadeyne, Ghesquière, & Onghena, 2004; Humphrey & Mullins; 2002). Feelings of discomfort, anxiety, and frustration are often associated with failure experiences in school demands such as reading aloud in front of the classmates or in situations when traditional teaching methodologies based purely on writing-reading skills. Such situations negatively impact the learning motivation and engagement of students with LD, with students avoiding to engage in activities that require any sort of academic effort or skills (Nelson & Harwood, 2011).

Social, emotional and behavioural difficulties

Students with LD seem to be less accurate in recognizing expressions of emotions such as anger, fear, joy, and embarrassment (Wiig & Harris, 1974), showing more difficulties in correctly interpreting social situations and in predicting the behavioural consequences of specific actions (Bruno, 1981; Saloner & Gettinger, 1985). Furthermore, they show fewer and less sophisticated strategies to manage conflict resolution compared with peers without LD, especially in tasks that require the ability to understand social situations, such as exhibiting a tendency to wrongly attribute negative intents to others' behaviour and the emotional states of others (Mattys, Cuperus, & Van Engeland, 1999; Pina, Marino, Spadaro, & Sorrentini, 2013).

Students with LD are also prone to manifest a higher level of behaviour problems, such as difficulty in maintaining and sustaining positive social interactions and verbal and non-verbal aggressive behaviours toward peers (Cullinan, 2002; Gresham & McMillan, 1997). The impact of these problems increases with the growing difficulties in reading during the first years of primary school, and may exacerbate across time if they are not recognized and understood in the light of the specific learning disability. Likewise, frustration and lack of motivation may be experienced when the correct diagnosis is missing, with further negative consequences such as withdrawal from school (Fuchs & Fuchs, 2006). About 10% of children with LD may also show somatic symptoms such as migraine and stomach pain (Mugnaini, Lassi, La Malfa, & Albertini, 2009), while depressive symptoms and anxiety become more evident in adolescence (Bender, Rosenkrans, & Crane, 1999; Margari, et al., 2013).

Social-emotional learning programmes for personal and academic development

Research findings support the 'compensatory hypothesis' for the development of positive self-concept amongst children with LD, underlining their empowerment through non-academic domains (such as social and emotional learning, physical activity and sports) to overcome the perception of difficulties in learning (Wong & Donahue, 2002). Hattie's (1992) meta-analysis concluded that the implementation of school-based programmes that include psycho-motor activities seems to be a strong protective factor for positive self-esteem. Extra-curricular activities have been found to be considerably important to practice social skills in a social context beyond the classroom environment that enables children with LD to gain self-confidence in building and maintaining social relationships (Brooks, 2013). In this paper we argue for universal social-emotional learning programmes as an empowering and protective process for students with LD. Universal programmes are designed for all children in the school, usually delivered with the whole classroom; in

contrast targeted interventions are aimed at children at risk (selective interventions) or manifesting difficulties in their development (indicated interventions).

Numerous studies have reported the positive impact of universal social-emotional learning programmes on social, emotional and academic outcomes, including a decrease in aggressive, anti-social and conduct behaviors (Wilson & Lipsey, 2007) as well as in emotional distress, depressive symptoms (Horowitz & Garber, 2007), and at risk-behaviors (Tobler et al., 2000). Recent research, including meta-analyses and reviews of evaluation studies, have shown that such programmes had a significant impact on positive attitudes towards the self, others and learning, and on the enhancement of prosocial behaviour and academic learning (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Sklad, Diekstra, De Ritter, & Ben, 2012; Taylor, Oberle, Durlak, & Weissberg, 2017).

The positive impact of universal SEL programmes have been reported amongst all school children, regardless of students' race, socioeconomic background, or school location (Durlak et al., 2011; Taylor et al., 2017). Furthermore, reviews of evaluation studies such as those by Wilson and Lipsey (2007), Weare and Nind (2011) and Clarke, Morreale, Field, Hussein, & Barry, 2015), found that such programmes were particularly effective for students at risk. Wilson and Lipsey's (2007) review of programmes in the prevention of aggressive behaviours concluded that universal programmes delivered to all the students in a classroom or school are a key component for the prevention and reduction of aggressive behaviour in school children. Clarke et al. (2015) found that universal interventions aimed at increasing social and emotional competences and reducing problem behaviours. Similarly, Weare and Nind (2011) reported that universal approaches had a positive impact on the mental health of all children, and that interventions appeared to be particularly effective for children most at risk.

In their evaluation of the long-term effectiveness of the PATHS programme, a universal curriculum which focuses on the development of children's emotional competence, self-regulation, and social problem solving skills, Kam, Greenberg and Kusché (2004) reported that the curriculum reduced internalizing and externalizing problem behaviours in students attending special education classrooms, even two years after the intervention. KidsMatter, a universal national SEL framework in Australian schools, has been found to reduce mental health difficulties and enhance the wellbeing of students with a disability in the early years and in primary school years (Dix, Jarvis, & Slee, 2013; Dix, Shearer, Slee, & Butcher, 2010).

Elias (2004) concludes that SEL interventions that are comprehensive and link academic and socialemotional learning have the greatest likelihood of helping students with LD. These include recognizing and regulating emotions, recognizing strengths and needs, listening and communicating accurately and clearly, perspective taking, and respecting others; setting positive and realistic goals; problem-solving, decision making, showing ethical and social responsibility, building positive relationships, resisting negative peer pressure, cooperation, teamwork, and management of conflicts, help-seeking and help-giving. Similarly, Milligan, Phillips, and Morgan (2016) postulate that effective SEL programmes for students with LD should include activities focused on communication skills such as managing a conversation, asking questions and listening skills, and social and emotional skills including self-regulation, anger management, cooperation and perspective taking.

Implications for the inclusion of students with LD

The above discussion suggests that universal SEL needs to be a core component in the education of students with LD (cf. Bhan & Farooqui, 2013; Pavri, 2006).Whilst it does not take away the importance of individual programming and targeted interventions, universal SEL supports and social and emotional as well as the academic learning of students with LD within a mainstream, inclusive classroom. It avoids the potential risk of labelling and stigmatization which may result from individualized, targeted and out of class interventions. On the other hand, it supports the inclusion of students with LD by both helping students to develop such competences as good work habits, collaboration, and healthy relationships as well as enhancing their equal valuing among mainstream peers (Cavioni & Zanetti, 2015; Cefai et al., 2014; Durlak, et al., 2011; Zins, Bloodworth, Weissberg, & Walberg, 2004).

Universal SEL programmes needs to be accompanied and supported by classroom and whole-school processes which promote social and emotional learning and inclusive practices. These include the promotion of social relationships and a sense of belongingness among all students in the classroom. According to Riddick (2010), having friends with similar LD inside or outside the class and having the possibility to share with them the same school initiatives and support interventions, helps students with LD to feel less alone and more positive about themselves. Effective support by the classroom teacher, within a caring relationship and responsive pedagogy, signals acceptance behaviors and encouragement that promote inclusion and respect for individual educational needs, while ensuring a sense of belonging and reducing experiences of humiliation and failure (Hamre & Pianta, 2006). Positive responses, such as acceptance behaviours and encouragement that promote inclusion and respect for individual educational needs, can relieve the negative impact of LD, protecting and increasing student self-esteem despite school experiences of failure (Bear & Minke, 1996). Building a collaborative partnership with the families of students with LD on shared goals to support the students' social and emotional development and inclusion is another key whole-school process to support the social and emotional learning and inclusion of such students (Cefai & Cavioni, 2016; Frankel, Myatt, Cantwell, & Feinberg, 1997; Riddick, 2010).

Although international research has consistently underlined the positive impact of universal SEL programmes for all students, including those at risk or experiencing difficulties, there is a dearth of studies on the impact of such programmes on the well-being, learning and development of students with LD. More research is thus needed to study the impact of universal programmes on the academic learning, positive behaviour, mental health and social inclusion of students with LD. A promising approach is 'proportionate universalism' which targets the social and emotional needs of students with difficulties, such as LD, within a whole-classroom universal program approach (Cefai et al., 2015). The discussion in this paper is thus a call for the development and evaluation of universal social-emotional learning programmes that also target the social and academic inclusion of students with LD in inclusive contexts.

References

- American Psychiatric Association. (2013). *Diagnostic And Statistical Manual Of Mental Disorders*. *Fifth Edition*. Arlington, VA: American Psychiatric Association.
- Bagwell, C. L., Newcomb, A. F., & Bukowski, W. M. (1998). Preadolescent Friendship and Peer Rejection as Predictors of Adult Adjustment. *Child Development*, *69*(1), 140-153.
- Bakker, J., Denessen, E., Bosman, A. T., Krijgert, E. M., & Bouts, L. (2007). Sociometric status and selfimage of children with specific and general learning disabilities in dutch general and special education classes. *Learning Disability Quarterly*, 30(1), 47-62.
- Bear, G., & Minke, K. M. (1996). Positive bias in maintenance of self-worth among children with LD. *Learning Disability Quarterly, 19*, 23-32.
- Bender, W., Rosenkrans, C. B., & Crane, M. K. (1999). Stress, depression, and suicide among students with learning disabilities: Assessing the risk. *Learning Disability Quarterly*, 22(2), 143-156.
- Bhan, S., Farooqui, Z. (2013). Social Skills Training of Children with Learning Disability. *Disability, CBR & Inclusive Development, 24*(2), 54-63.
- Brooks, B. (2013). *Extracurricular Activities And The Development Of Social Skills In Children With Intellectual And Learning Disabilities*. Retrieved on 6th October 2017 from: http://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1107&context=psych_theses
- Bruno, R. M. (1981). Interpretation of pictorially presented social situations by learning disabled and normal children. *Journal of Learning Disabilities*, *14*, 350-352.
- Bryan, T. (1974a). An observational analysis of classroom behaviors of children with learning disabilities. *Journal of Learning Disabilities*, 7(1), 26-34.
- Bryan, T. (1974b). Peer popularity of learning disabled children. *Journal of Learning Disabilities*, 7(10), 621-625.
- Bryan, T. (1976). Peer popularity of learning disabled children: a replication. *Journal of learning disabilities, 9*(5), 307-311.
- Bryan, T., Pearl, R., & Fallon, P. (1989). Conformity to peer pressure by students with learning disabilities: a replication. *Journal of Learning Disabilities*, 22(7), 458-459.
- Bryan, T., Werner, M., & Pearl, R. (1982). Learning Disabled Students' Conformity Responses to Prosocial and Antisocial Situations. *Learning Disability Quarterly*, *5*(4), 344-352.
- Butler, K. G., & Silliman, E. R. (2008). *Speaking, Reading, and Writing. New Paradigms in Research and Practice*. London: Lawrence Erlbaum Associates, Inc.
- Catalano, R. F., Berglund, M. L., Ryan, J. A., Lonczak, H. S., & Hawkins, J. D. (2002). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prevention & Treatment*, 5(1), 15a.
- Cavioni, V., & Zanetti, M. A. (2015). Social-Emotional Learning and Students' Transition from Kindergarten to Primary School in Italy. In H. Askell-Williams, *Transforming the Future of Learning with educational research* (pp. 241-258). Hershey, PA: IGI Global.

- Cefai, C., & Cavioni, V. (2016) Parents as active partners in social and emotional learning at school. In B.
 Kirkcaldy (Ed.), *Psychotherapy in Parenthood and Beyond. Personal enrichment in our lives* (pp.55-66). Turin, Italy: Edizoni Minerva Medica.
- Cefai, C., Cavioni, V., Bartolo, P., Simoes, C., Miljevic-Ridicki, R., Bouilet, D. Pavin Ivanec, T.,
 Matsopoulos, A., Gavogiannaki, M., Zanetti, M. A., Galea, K., Lebre, P., Kimber, B., & Eriksson, C. (2015). Social inclusion and social justice: A resilience curriculum for early years and elementary schools in Europe. Journal for Multicultural Education, 9(3),122-139.
- Cefai, C., Ferrario, E., Cavioni, V., Carter, A., & Grech, T. (2014). Circle time for social and emotional learning in primary school. *Pastoral Care in Education*, 32(2), 116-130.
- Clarke, A. M., Morreale, S., Field, C. A., Hussein, Y., & Barry, M. M. (2015). What works in enhancing social and emotional skills development during childhood and adolescence? A review of the evidence on the effectiveness of school-based and out-of-school programmes in the UK. World Health Organization Collaborating Centre for Health Promotion Research, National University of Ireland Galway.
- Cullinan, D. (2002). *Students with emotional and behavioral disorders: An introduction for teachers and other helping professionals.* Upper Saddle River, N J: Merrill/Prentice Hall.
- Dix, K. L, Jarvis, J., & Slee, P. T. (2013). *KidsMatter and Young Children with Disability*. Shannon Research Press, Adelaide.
- Dix, K. L., Shearer, J., Slee, P. T., & Butcher, C. (2010). *KidsMatter for Students with a Disability: Evaluation Report. Ministerial Advisory Committee: Students with Disabilities.* Adelaide, Australia.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based suniversal interventions. *Child Development*, 82(1), 405-432.
- Elias, M. J. (2004). The Connection between Social-Emotional Learning and Learning Disabilities: Implications for Intervention. *Learning Disability Quarterly*, 27(1), 53-63.
- Frankel, F., Myatt, R., Cantwell, D. P., & Feinberg, D. T. (1997). Parent-assisted transfer of children's social skills training: effects on children with and without attention-deficit hyperactivity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36(8), 1056-1064.
- Fuchs, D., & Fuchs, L. S. (2006). Introduction to response to intervention: What, why, and how valid is it? *Reading research quarterly*, 41(1), 93-99.
- Gadeyne, E., Ghesquière, P., & Onghena, P. (2004). Psychosocial functioning of young children with learning problems. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *45*(3), 510-521.
- Gresham, F. M., & McMillan, D. L. (1997). Social competence and affective characteristics of students with mild disabilities. *Review of Educational Research*, 67, 377-415.
- Hamre, B., & Pianta, R. C. (2006). Student-Teacher Relationships. In G. G. Bear, & K. M. Minke (Eds.),
 Children's needs III: Development, prevention, and intervention (pp. 59-71). Washington, DC, US: National Association of School Psychologists.

- Hattie, J. (1992). Towards a model of schooling: A synthesis of metaanalyses. *Australian Journal of Education*, *36*, 5-13.
- Horowitz, J. L., & Garber, J. (2007). The prevention of depressive symptoms in children and adolescents: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *74*, 401-415.
- Humphrey, N., & Mullins, P. M. (2002). Self-concept and self-esteem in developmental dyslexia. *Journal of Research in Special Educational Need*, 2(2).
- Kam, C-M, Greenberg, M. T., & Kusche, C. A. (2004). Sustained Effects of the PATHS Curriculum on the Social and Psychological Adjustment of Children in Special Education. *Journal of Emotional and Behavioral Disorders*, 12(2), 66-78
- Kavale, K. A., & Forness, S. R. (1996). Social skills deficits and learning disabilities: A meta-analysis. *Journal of Learning Disabilities*, 29, 226-237..
- Magalit, M., & Al-Yagon, M. (2002). The loneliness experience of children with learning disabilities. In B.Y. Wong, & M. Donahue (Eds.), *The social dimensions of learning disabilities* (pp. 53-75). New York: Routledge Education.
- Margari, L., Buttiglione, M., Craig, F., Cristella, A., De Giambattista, C., Matera, E., & Simone, M. (2013). Neuropsychopathological comorbidities in learning disorders. *BMC Neurology* (13), 198.
- Mattys, W., Cuperus, J. M., & Van Engeland, H. (1999). Deficient social problem-solving g in boys with ODD/CD, with ADHD, and with both disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, *38*, 311-321.
- McNamara, J., Vervaeke, S., & Willoughby, T. (2008). Learning Disabilities and Risk-Taking Behavior in Adolescents. A Comparison of Those With and Without Comorbid Attention-Deficit/Hyperactivity Disorder. *Journal of Learning Disabilities*, *41*(6), 561-574.
- Milligan, K., Phillips, M., & Morgan, A. S. (2016). Tailoring Social Competence Interventions for Children with Learning Disabilities. *Journal of Child and Family Studies*, 25(3), 856-869.
- Mugnaini, D., Lassi, S., La Malfa, G., & Albertini, G. (2009). Internalizing correlates of dyslexia. *World Journal of Pediatrics*, *5*(4), 255-264.
- Nelson, J. M., & Harwood, H. (2011). Learning disabilities and anxiety: a meta-analysis. *Journal of Learning Disabilities*, 44(1), 3-17.
- Ochoa, S. H., & Olivarez, A. (1995). A meta-analysis of peer rating sociometric studies of pupils with learning disabilities. *The Journal of Special Education*, *29*, 1-19.
- Pavri, S. (2006). Introduction: School-Based Interventions to Social and Emotional Competence in Students with Reading Difficulties,. *Reading & Writing Quarterly*, 22(2), 99-101.
- Pearl, R., Farmer, T. W., Van Acker, R., Rodkin, P. C., Bost, K. K., Coe, M., & Henley, W. (1998). The social integration of students with mild disabilities in general education classrooms: Peer group membership and peer-assessed social behaviour. *The Elementary School Journal*, 99, 167–185.
- Pina, F., Marino, F., Spadaro, L., & Sorrentini, L. (2013). Learning disabilities and social problem solving skills. *Mediterranean Journal of Clinical Psychology*, 1(2), 1-23.

- Riddick, B. (2010). *Living with Dyslexia. The social and emotional consequences of specific learning difficulties/disabilities.* New York: Routledge.
- Saloner, M., & Gettinger, M. (1985). Social inference skills in learning disabled and nondisabled children. *Psychology in the Schools, 22, 201–207.*
- Schiff, R., & Joshi, R. M. (2016). *Interventions in Learning. A Handbook on Systematic Training Programs* for Individuals with Learning Disabilities. Switzerland: Springer International Publishing.
- Schneider, B. H., Wiener, J. J., & Murphy, K. (1994). Children's friendships: The giant step beyond peer relations. *Journal of Social and Personal Relationships*, *11*, 323-340.
- Sklad, M., Diekstra, R., De Ritter, M., & Ben, J. (2012). Effectiveness of school-based universal social, emotional, and behavioral programs: Do they enhance students' development in the area of skill, behavior, and adjustment? *Psychology in the Schools, 49*(9), 892–909.
- Swanson, H. L., & Malone, S. (1992). Social skills and learning disabilities: A meta-analysis of the literature. *School Psychology Review*, 21, 427-443.
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting Positive Youth Development Through School-Based Social and Emotional Learning Interventions: A Meta-Analysis of Follow-Up Effects. *Child Development*, 1156-1171.
- Tobler, N. S., Roona, M. R., Ochshorn, P., Marshall, D. G., Streke, A. V., & Stackpole, K. M. (2000). Schoolbased adolescent drug prevention programs: 1998 meta-analysis. *Journal of Primary Prevention*, 30, 275-336.
- Tur-Kaspa, H. M. (1999). Reciprocal friendship reciprocal rejection and socio-emotional adjustment: the social experiences of children with learning disorders over a one-year period. *European Journal of Special Needs Education*, 14(1), 37-48.
- Valås, H. (1999). Students with learning disabilities and low-achieving students: Peer acceptance, loneliness, self-esteem and depression. *Social Psychology of Education, 3*, 173-192.
- Weare, K., & Nind, M. (2011). Mental health promotion and problem prevention in schools: What does the evidence say? *Health Promotion International*, 26(S1), i29-i69.
- Wentzel, K. R., Barry, C. M., & Caldwell, K. A. (2004). Friendships in middle school: Influences on motivation and school adjustment. *Journal of Educational Psychology*, 96, 195-203.
- Wiener, J. (2002). Friendship and social adjustment of children with learning disabilities. In B. Wong, & M. Donahue (Eds.), *The social dimensions of learning disabilities: Essays in honor of Tanis Bryan* (pp. 93-11). Chicago: Lawrence Erlbaum Associates.
- Wiener, J., & Schneider, B. (2002). A multisource exploration of friendship patterns of children with learning disabilities. *Journal of Abnormal Child Psychology*, 30, 127-141.
- Wiig, E., & Harris, S. (1974). Perception and interpretation of nonverbally expressed emotions by adolescents with learning disabilities. *Perceptual and Motor Skills*, 38, 239-245.
- Wilson, S. J., & Lipsey, M. W. (2007). School-based interventions for aggressive and disruptive behavior: Update of a meta-analysis. *American Journal of Preventive Medicine*, 33(25), 130-143.

- Wong, B. Y., & Donahue, M. L. (2002). The Social Dimensions of Learning Disabilities: Essays in Honor of Tanis Bryan. New York: Routledge.
- Yu, G., Zhang, Y., & Yan, R. (2005). Loneliness, peer acceptance, and family functioning of Chinese children with learning disabilities: Characteristics and relationships. *Psychology in the Schools*, 42(3), 325-331.
- Zeleke, S. (2004). Differences in self-concept among children with mathematics disabilities and their average and high achieving peers. *International Journal of Disability, Development and Education*, 51(3), 253-269.
- Zins, J., Bloodworth, M., Weissberg, R., & Walberg, H. (2004). The scientific base linking social and emotional learning to school success. In J. Zins, R. Weissberg, M. Wang, & H. J. Walberg (Eds.), *Building academic success on social and emotional learning: What does the research say?* (pp. 1-22). New York, NY: Teachers Press, Columbia University.