The Salutogenic approach to students with learning disabilities: Predictors of hope and loneliness

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Abstract: In order to promote educational equity and inclusion opportunities for students with learning disabilities (LD), research focused attention at the need for identifying empowering predictors for students, focusing attention at their hopes, self beliefs, effort and struggle with loneliness. The salutogenic paradigm examines the dynamic movement along health ease/disease continuum. In extending the traditional children's loneliness conceptualization, which related loneliness with social status and social difficulties, research emphasized the interacting role of academic and social challenges, and the paradoxical resilience factors. The pathogenic approach focused effort at the assessment and remediation of specific disabilities in reading, writing and mathematics. Yet, the proposed approach is rooted in the resilience conceptualization, striving to empower students with LD, without denying their specific difficulties. Our research group demonstrated the value of hope and the challenges of loneliness in explaining resilience, pinpointing attention at the need for teachers' sensitizing, inter-cultural considerations and training implications. The goals of the current study were to compare hope, loneliness, sense of coherence and effort between 123 seventh-grade students with LD (75 boys and 48 girls) and a matching group of 123 typically achieving students who attended the same general education classes. The groups were matched for average achievement levels and gender. The results showed that students with LD reported lower levels of hope, decreased investment of effort in their academic work and lower self perceptions (sense of coherence). They also experienced higher levels of loneliness. The analysis of factors related to effort and achievement revealed the interactions between hope, sense of coherence and loneliness and strongly suggests the need for comprehensive examination. The study educational implications within resilience trends in education have a clear implication for teachers' education, to enhance equal opportunities for students with LD.

The Salutogenic approach to students with learning disabilities: Predictors of hope and loneliness

The goals of this study are to offer empowering paradigm for promoting success and wellbeing for students with learning disabilities. In order to promote educational equity and to expand inclusion opportunities for students with learning disabilities (LD) (Margalit, 2003), research challenge conventional approaches, focusing attention at the need for identifying predictors of resilience for students, pinpointing attention at the critical value of the hope theory, self beliefs, effort and the students' struggle with loneliness. The APA report on teachers' needs, based on the ratings of 2334 teachers from 49 States in USA reported their requests for professional development not only in curricular dilemmas, but also in effective classroom management and instructional strategies, and calling attention at their wishes to learn more about means for motivating students regardless their diversity in skills and difficulties (Coalition for Psychology in Schools and Education, 2006, August). The goals of the current paper are to present the educational implications of the salutogenic paradigm, within the new trends of resilience research and to exemplify the contribution of the hope theory and loneliness research to education of students, and to provide educational implications for teachers' training.

Resilience and the Salutogenic approach

Resilience can be considered the positive and unexpected outcomes, characterized by a particular pattern of functional behavior regardless the recognized risk (Olsson, Bound, Burns, Wella-Brodrick, & Sawyer, 2003). Resilience refers to the dynamic process of positive adaptation, in the context of significant adversity. Thus, two critical conditions are implicit within this construct (Tugade & Fredrickson, 2004):

- Exposure to a significant threat or severe adversity.
- Individual variations in the responses to adversity.

Resilience research in learning disabilities (Margalit, 2004) aims at identifying the sources of students' hope and the roots of their personal energy to shape not only their academic achievements, but also their well-being, and adjustment. Early research (Anthony, 1987) considered resilience a "remarkable aptitude", a trait that only few unique ("super") individuals possessed. Currently, there is a growing recognition that resilience may emerge from ordinary normative human resources, can be achieved by ordinary people who are facing adversity, and thus it is termed "everyday magic" (Masten, 2001). Resilience as a dynamic process of adaptation, involves the interaction between a wide range of risk and protective factors. This critical theoretical shift from the traditional trait conceptualization (answering the question – who is a resilient "super" student) to the dynamic construct that examines processes of adaptation and development. In line with this approach, there is a constant search for inner energy resources as well as for external energizing factors (answering the question – how can the student become resilient) (Beasley, Thompson, & Davidson, 2003). This move from the search of stable traits to studies exploring the dynamic processing, demonstrates the value of the hope theory for empowering students with learning disabilities (Margalit, 2004).

Children with learning disabilities are defined by their academic difficulties and deficiencies. The need to acquire fluency in reading, writing and arithmetic skills is considered a major challenge in their developmental processes, and significant risks for their current adjustment and future expectations. Research focused attention at the roots and specific nature of their disabilities, directing assessment and remedial effort at their difficulties, and often neglecting global approaches that recognized the need for in-depth study of children who successfully function with (or regardless) their disabilities. The move towards resilience paradigms reflected the scientific dissatisfaction with the deficit model as the predominant view of learning disabilities (Wong, 2003; Morrison, & Cosden, 1997). The deficit model underestimates the capacities of young people for growth and well-being by focusing attention at their deficits rather than on their developmental potential. Conversely the resilience approach concentrates research effort at identifying the critical predictors that help to accurately capture the full potential of young people to learn and to thrive in diverse settings (Damon, 2004) regardless of their individual disabilities. Resilience studies that identified successful children with LD emphasized the need to move from pathogenic to salutogenic approaches (Raskind, Goldberg, Higgins, & Herman, 2002).

Antonovsky (1987) coined the term "salutogenesis," from *salus,* the Latin expression for health and well-being, to emphasize the focus of his model on health rather than on disease (i.e., the pathogenesis emphasis). He proposed a paradigm to account for the unexpected fact, which some people stay relatively well, despite experiencing major challenges in their lives. The salutogenic model rejects the dichotomous classification of people either as healthy or diseased. It aims at exploring the origin of health rather than trying to explain the causes of disease and disabilities. The salutogenic paradigm examines factors that contributed to the dynamic movement of individuals along health

ease/dis-ease continuum. In our studies of children with learning disabilities, we focused research and intervention planning at identifying factors that will predict children abilities to face challenges, to employ effectively remedial strategies and to focus consistent effort in order to reach success. The Sense of Coherence construct (Antonovsky, 1993) is a central concept in the salutogenic paradigm. The sense of coherence (Antonovsky, 1987) can be defined as a global enduring orientation that allows the individual to see the world as comprehensible, manageable, and meaningful. A strong sense of coherence is related to the availability of a wide and varied repertoire of coping strategies, and to flexibility in selecting the particular coping strategy that seems most appropriate at a certain time and environmental condition. Antonovsky and Sourani (1988) considered the sense of coherence construct not as a specific coping style, but rather a personality characteristic, related to flexibility in selecting appropriate coping behaviors. Often an individual who demonstrates a high sense of coherence will be more successful in transforming his/her potential resources into reality and will be better able to cope with life stressors.

Adolescents, who understand most demands and expectations within their environments, who cope (even with adults' help) with most developmental tasks, and who can invest and focus their efforts in their academic and nonacademic challenges will feel more coherent and resilient than their peers. Given the added difficulties of students with LD, it is not surprising that lower sense of coherence scores have been found repeatedly among this group in comparisons to their nondisabled peers (Margalit, 1994). Sense of Coherence is a global measure that assesses the individuals' beliefs in them (Margalit, 1999). It helps individuals to understand, manage and find meanings in their world. Life experiences, which are characterized by the possibility to take part in shaping the future outcomes: in terms of hopes (Snyder, 2002) may support the development of a strong sense of coherence, and it can be expected that children and adults with a stronger sense of coherence will have more positive hopes.

Hope theory
Hope as an empirical paradigm (Snyder, Feldman, Shorey, & Rand, 2002) has unique significance for understanding and promoting the resilience of students with learning disabilities. Snyder (2002) defines hope as a learned thinking pattern, a set of beliefs and thoughts, which involves relatively distinct ways of thinking about a goal:
        1. Agentic thinking
        2. Pathways thinking.

Agentic thinking involves the contemplation related to one's success in reaching goals (e.g., "I meet the goals that I set for myself"); whereas pathway thinking involves the deliberation about one's effectiveness when pursuing different strategies and means to obtain personal goals ("I can think of many ways to get what I want"). However, hope is also one's belief in one's ability to pursue goals. This belief is thought to lead to corresponding hopeful behavior that, in turn, strengthens hopeful thoughts (Shorey, Snyder, Rand, Hockemeyer & Feldman, 2002). Such reciprocal relations between hopeful thinking and achievements were documented in different fields (Snyder et al. 2003). In order to be engaged in hopeful thinking, it is necessary to define specific and operational goals. Hopeful thinking also requires that the children or adults will approach the desired goal equipped with effective strategies/pathways to reach that goal. The third factor considers the search for motivation/personal energy that can be used to reach these goals.

Hope theory is different from romantic, wishful thinking. The scientific construct views hope as complex and challenging, creative and sometimes dangerous processing. It can empower the individual, yet it may also increase individuals' vulnerability, if it is nurturing unreachable/false hopes (Snyder, et al. 2003). Hoping can be deeply personal, and/or highly interpersonal (requiring the assistance of others). Hope may be nurtured in different social contexts, such as school or family, which may serve as protective factors. Throughout their school years, students are faced with an array of increasingly important and difficult choices. These range from deciding what to do for an elementary school project, if and where to go to college, and which occupation to pursue (Snyder, 2002). Hope enables these children to set valued goals, to see the means to achieve these goals, and to find the drive to make these goals happen (Snyder et al., 2002).

The hope paradigm includes one's capability to derive pathways to desired goals, and to motivate oneself, via agency thinking, to use those pathways. These two components of the hope paradigm - the self-perceptions of children that they can produce routes to desired goals (the pathways component), along with their motivation to use those routes (the agency component) (Snyder, 2002) are reciprocal, additive, and positively related, although they are not synonymous. Higher hope is consistently related to better outcomes in academics, athletics, physical health, psychological adjustment, and psychotherapy (Snyder, 2002). Hope is also related to positive affect and perceived control (Curry, Snyder, Cook, Ruby, & Rehm, 1997).

The dynamic interactions between personal (inner) and environmental (contextual) factors may modify children's responses to adversity, predicting their hope for change, their ability to adapt through various developmental paths regardless of major assaults on the developmental processes, and expectations for well-being (Luthar, Cicchetti, & Becker, 2000). Genetic studies have added to the complexity of the construct by reporting that resilience may be considered partly heritable (Kim-Cohen, Moffitt, Caspi, & Taylor, 2004). This study suggested that protective processes operate through both genetic and environmental factors, and the genetic characteristics of the individual predict through interacting with the nature of the emerging environmental forces the resilient outcomes (Kim-Cohen et al., 2004). Thus, even though our research interest is focused on processes and potential for change, it is clear that every intervention planning should take into consideration the basic personal traits that, through interacting with environmental factors, will create unique conditions for development.

Without denying the critical role of genetic factors, traits, disabilities, and difficulties of students with learning disabilities, in order to identify predictors and define individual differences for adjustment and well-being, the differential and interactional roles of students' self-perceptions will be discussed as mediated through environmental support or interfering processes (Van de Vliert, Huang & Parker, 2004). Through a series of studies we explored students' hope for success, and their self-identity negotiation and motivation, and how students' inclination to experience loneliness may interrupt their hopeful thinking (Lackaye & Margalit, 2006).

Loneliness
Loneliness is considered not only as a reflection of social difficulties, social skills' deficit and the outcomes of peer rejection, but as a global indicator of social-related stress (Margalit, 1994). Before pointing at the current culturally related trends in loneliness research as reported by students with LD, I would like to demonstrate the significant of this line of

investigations (*why is it important to study children's loneliness*?) and to present classic definitions (*what is loneliness*?)

Regardless of the loneliness conceptual debates, the importance of understanding this emotional experience was commonly accepted among researchers and clinicians, not only as an indicator of life quality or due to the tendency to become (through developmental processes) a stable personality characteristic. But because of its relations with short and long term stress-related health risks (Cacioppo, Ernst, Burleson, McClintock, Malarkey, & Hawkley, 2000; Cacioppo, Hawkley, Crawford, Ernst, Burleson, Kowalewski, 2002; Cacioppo, Hughes, Waite, Hawkley, & Thisted, 2006; Koolhaas, de Boer, & Buwalda, 2006). Without entering into the detailed description of the related biological processes, the mentioned above studies accentuated the predictive value of stress to the development of health risks, and documented the relations of loneliness experiences with increased levels of stress, pointing at different biological mechanisms that may provide explanations for the short-term as well as the long-term impacts of loneliness on health and well-being.

Classic definitions focused attention at the subjective qualities of this distressed emotional experience. Peplau and Perlman (1982) defined loneliness as the unpleasant experience when individuals perceive a discrepancy between the desired and accomplished patterns of their social networks. Asher et al (1990) proposed that the loneliness experience is a global indicator of dissatisfaction from the quality and/or the quantity of individuals' social interrelations. Weiss (1973) in his classic monograph, rejected the global approach to loneliness conceptualization, and proposed a bimodal loneliness construct, differentiating between two types of distresses:

- A social distress emerging as a result of the lack (or the loss) of satisfactory connections to significant social groups such as networks of friends, colleagues, etc. The studies of social loneliness were examined within the conceptualization of peer relations, social status (peer nomination/rejection) and social skills (Asher, & Paquette, 2003). Children who experienced social loneliness often complained that their peer reject them, and they are not invited to participate in desired social activities (children complained for example "everybody is having fun while I stayed alone at home").

- An emotional distress emerging as a result of the lack (or the loss) of intimately close persons (best friends or loved one). The studies of emotional loneliness were examined within the attachment and the secure-base framework, focusing attention at models of early relations between infants and their caregivers (Mikulincer, & Florian, 2001). Children who experienced emotional loneliness often complained that they don't have a good friend who truly understands them and with whom they can share secrets").

The unsolved debate between treating loneliness as a global, complex (multivariate) index of distress, or as the bimodal construct of loneliness, did not interfere with acknowledgement of the following generalized characteristics that have been commonly accepted within the classic definitions (Margalit, 1994):

- Loneliness is a subjective evaluation, related to cognitive processing (children may stay alone without experiencing loneliness. Yet, they may feel lonely even in a crowd).
- Loneliness occurs within the context of social relations: reflecting a withdrawal from interpersonal contacts.
- Loneliness is a shared common phenomenon; regardless of its subjective quality (individuals in different cultures understand the meaning of the distress – "I am lonely", similarly, even if they may differently cope with it).

- Loneliness is a distressing negative emotional experience, reflecting unsatisfied basic psychological needs for relatedness and/or closeness.

We hypothesized that students with learning disabilities will experience personal and interpersonal distress more than their nondisabled peers. They will report lower sense of coherence (as a reflection of their past and current frustrations), decreased hope (as a reflection of their expectations for future frustrations), and higher levels of loneliness. Effort investment will be related to their school achievements as well as to their personal (sense of coherence and hope) and interpersonal (loneliness) experiences.

Method
Participants
    The sample consisted of 123 seventh-grade students with LD (75 boys and 48 girls) and a matching group of 123 typically achieving students who attended the same general education classes. The sample was taken from a larger study (Lackaye, Margalit, Ziv & Ziman, 2006), and the groups were matched by average achievement levels at their schools and gender from the same classes.

Instruments
    From the comprehensive study, the research instruments that will be discussed in this article consisted of the *Sense of Coherence (Antonovsky, 1987), Loneliness (Asher et al, 1990), Effort (*adapted from Meltzer scale, (Meltzer, Reddy, Pollica, Roditi, Sayer, & Theokas, 2004) and *Hope (*Snyder, 2002).
The Children's Sense of Coherence Scale (Margalit & Efrati, 1995) is a self-report scale consisting of 16 items tapping three dimensions of children's sense of confidence in the world: (a) sense of comprehensibility – feelings that one understands one's environment (e.g., "I feel that I don't understand what to do in class"); (b) sense of manageability – feelings of control and confidence that positive rewards are available (e.g., "When I want something I'm sure I'll get it"); and (c) sense of meaningfulness – motivation and interest in investing effort in different tasks (e.g., "I'm interested in lots of things"). , The 4-point frequency dimension scale ranges from 1 (never) to 4 (always); higher scores reflect a higher sense of coherence. Internal consistency for the measure (Cronbach alpha) is .75. A Cronbach alpha of .78 was obtained for the measure with participants in this study.

    The Hebrew adaptation (Margalit, Leyser, Ankonina, & Avraham, 1991) of the *Loneliness and Social Dissatisfaction Questionnaire* (Asher et al., 1990) is a self-report scale for children consisting of 16 primary items tapping a child's feelings of loneliness (e.g., "I have nobody to talk to in my class," "I am lonely") and 8 filler items (e.g., "I like school") that cover various activity areas. The 5-point frequency dimension scale ranges from Never (1) to Always (5); higher scores reflect more frequent feelings of loneliness. The measure has high internal consistency (Cronbach alpha = .86). A coefficient alpha for the scale of .89 was obtained in this study.

    The Hebrew adaptation of *The Children's Hope Scale* (Snyder, 2002) consists of 6 statements to which students respond on a 6-point Likert-type scale ranging from 1 (none of the time) to 6 (all of the time). There are three agency items (e.g., "I think I am doing pretty well") and three pathways items (e.g., "I can think of many ways to get things in life"). Internal consistency (Cronbach alphas) for the overall scale range from .72–.86, with a median of .77 and test– retest correlations of .71–.73 over one month. A Cronbach alpha of .89 was obtained in this study

The goal of the *Effort* scale is to tap the students' self-ratings of investment and of effort (Margalit, 2004) and the global score on the measure reflects self-perception of effort. The scale was adapted from the Meltzer scale for effort (Meltzer et al., 2004) for use in Israeli schools. The current scale consists of four items (e.g., "I don't give up even when it is difficult to me") on a 6-point frequency dimension scale with responses ranging for 1 (never) to 6 (always). A Cronbach alpha of .77 was obtained in this study.

Results and discussion

In order to compare students' ratings of Hope, Effort, Sense of Coherence and Loneliness between students with and without LD, a MANOVA was performed with group membership and gender as the independent variables. The results revealed a main effect for groups, $F(4, 239) = 2.99$, $p < .05$, no significant main effect for gender, and the interactions between groups and gender were not significant. The univariate analysis revealed significant differences between groups in all measures. Figure 1 presents the comparisons between groups. Students with LD reported higher levels of loneliness, and lower levels of Sense of Coherence, hope and effort.

Figure 1: Comparisons between self-perceptions among students with and without LD
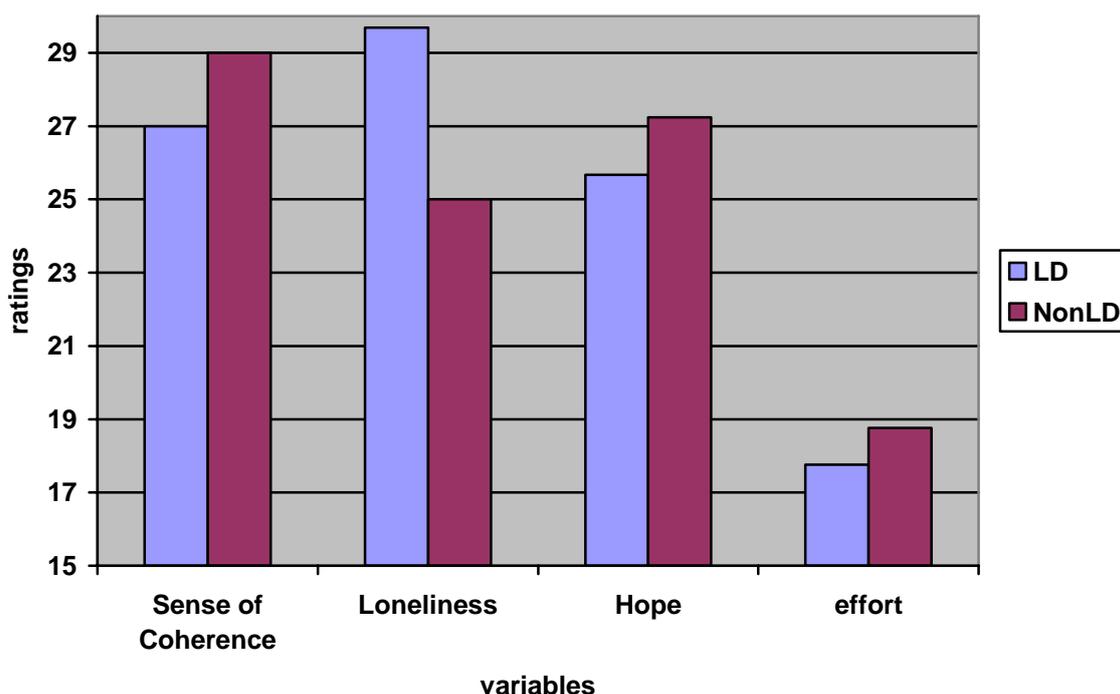
In order to explore the relations between variables, Pearson correlations were performed separately for the LD/NonLD groups. Since the groups' profiles of relations were not significantly different, combined correlations were performed for both groups. Effort was significantly related with average achievement (r=.21, p<.01 n= 246), with Sense of coherence (r=.36, p<.01, n= 246) and negatively related to loneliness (r=-27, p<.01, n= 246). Hope was related with effort (r=.68, p<.01, n= 246) average achievement (r=.14, p<.05 n= 246, n= 246), Sense of coherence (r=.48, p<.01, n= 246) and negatively related with loneliness (r= -46, p<.01, n= 246).
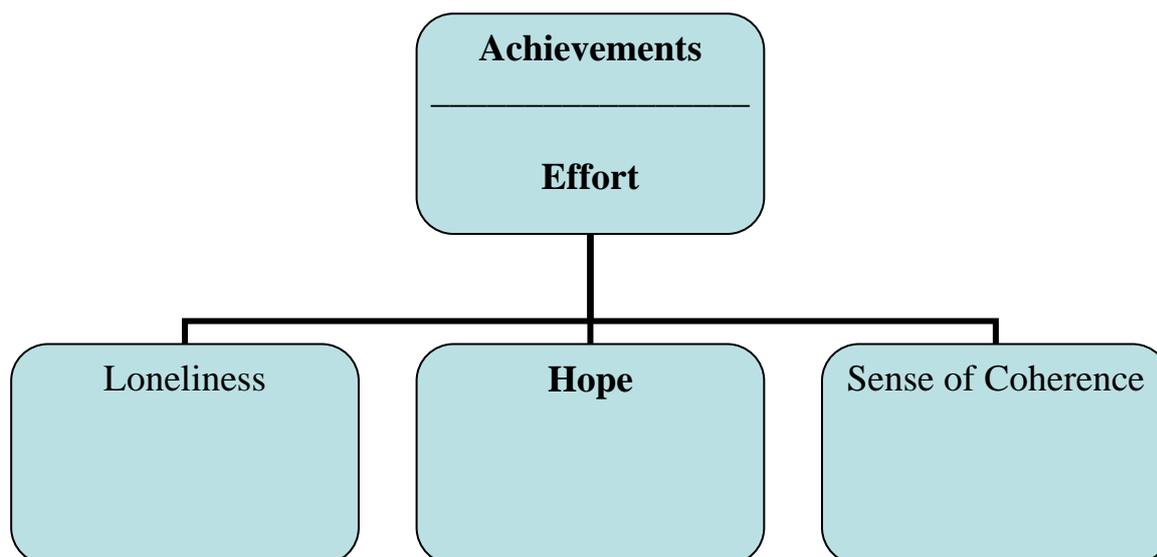
Figure 2: *The interrelations between the students' self perceptions and achievements*

The results showed that students with LD reported lower levels of hope, decreased investment of effort in their academic work and lower sense of coherence. They also experienced higher levels of loneliness. The analysis of relations revealed the connections between self perceptions and academic achievements for both groups of students. However, as presented on Figure 2, effort investment was related both to achievements and to hope, loneliness and sense of coherence. These results supported earlier studies {Lackaye & Margalit, 2006; Lackaye, Margalit, Ziv & Ziman, 2006), that examined the predicting factors of effort, pinpointing attention at the hope and its relations to personal (sense of coherence) and interpersonal (loneliness) beliefs as contributing to the explanation together with additional self perceptions such as academic and social self efficacy.

The results of this study have theoretical importance in further clarifying the social-emotional factors related to students' functioning. They demonstrate the importance of self-perceptions, which represent not only the current challenging circumstances of these students, but also reflect their long history of struggle, frustration, and difficulty. These results demonstrated the importance of the social-emotional factors in explaining school achievements, including the contribution of hopeful thinking in understanding the functioning of students with LD. Overall, the study advances the awareness to social factors to motivation understanding (Lane, 2006) by adding new aspects (i.e., hope). Additional studies are needed to further explore the reciprocal relations between hope and achievements and their relations to effort investment and loneliness experiences. Special attention in future research should be devoted to groups of students who regardless of their lower academic achievements continue to hold strong hopes. Initial explorations revealed that they cannot be judged as false hopes, since these students invest effort and revealed a strong interest in nonacademic domains such as sport and technology. Larger samples of students with learning disabilities may enable their subdivision into achievement groups and further explore the many meanings of resilience and hopes.

The educational implications of this study call for developing empowering school-based programs, targeting the students' decreased self-beliefs, and sensitizing teachers to the critical role of self-perceptions in predicting students' effort and achievements. In support of earlier studies that focused attention at the value of emotional aspects in predicting the success and failure of remedial programs (Andreassen, Knivsberg, & Niemi, 2006), this study showed

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that students with learning disabilities need help, support and assistance in developing hopeful thinking through training to identify appropriate goals and alternative goals, effective strategies and alternative strategies. Developing such a program may help in motivating students with learning disabilities. This is a challenge that needs experimentation and in depth studies that will account for intercultural differences (Hofer, 2006; Miller, 2005). I hope that this presentation is the first step towards international collaboration in research, teachers' sensitizing and the development of cultural-sensitive intervention programs for promoting equal opportunities for students with learning disabilities.

References

Andreassen, A. B., Knivsberg, A. M., & Niemi, P. (2006). Resistant readers 8 months later: energizing the student's learning milieu by targeted counseling. *Dyslexia, 12*(2), 115-133.

Anthony, E. J. (1987). Risk, vulnerability and resilience: An overview. In A. J. & B. J. Cohler (Eds.), *The invulnerable child* (pp. 3-48). New York: Guilford.

Antonovsky, A. (1987). *Unraveling the mystery of health*. San Francisco: Jossey-Bass.

Antonovsky, A. (1993). The implications of Salutogenesis: An outsider's view. In A. P. Turnbull, J. M. Patterson, S. K. Behr, D. L. Murphy, J. G. Marquis & M. J. Blue-Banning (Eds.), *Cognitive coping, families and disabilities* (pp. 111-122). Baltimore: Paul Brooks.

Antonovsky, A., & Sourani, T. (1988). Family sense of coherence and family adaptation. *Journal of Marriage and the Family, 50*(2), 79 - 92.

Asher, S. R., & Paquette, J. A. (2003). Loneliness and peer relations in childhood. *Current Directions in Psychological Sciences, 12*(3), 75 -- 78.

Asher, S. R., Parkhurst, J. T., Hymel, S., & Williams, G. A. (1990). Peer rejection and loneliness in childhood. In S. R. Asher & J. D. Coie (Eds.), *Peer rejection in childhood* (pp. 253-273). Cambridge, England: University Press.

Beasley, M., Thompson, T., & Davidson, J. (2003). Resilience in response to life stress: the effects of coping style and cognitive hardiness. *Personality and Individual Differences, 34*, 77-95.

Cacioppo, J. T., Ernst, J. M., Burleson, M. H., McClintock, M. K., Malarkey, W. B., & Hawkley, L. C. (2000). Lonely traits and concomitant physiological processes: The MacArthur Social Neuroscience Studies. *International Journal of Psychophysiology, 35*, 143-154.

Cacioppo, J. T., Hawkley, L. C., Crawford, L. E., Ernst, J. M., Burleson, M. H., Kowalewski, R. B., (2002). Loneliness and health: Potential mechanisms. *Psychosomatic Medicine, 64*, 407–417.

Cacioppo, J. T., Hughes, M. E., Waite, L. J., Hawkley, L. C., & Thisted, R. A. (2006). Loneliness as a Specific Risk Factor for Depressive Symptoms: Cross-Sectional and Longitudinal Analyses. *Psychology & Aging, 21*(1), 140-151.

Coalition for Psychology in Schools and Education. (2006, August). *APA Report on the Teacher Needs Survey*. Washington, D.C: American Psychological Association, Center for Psychology in Schools and Education.

Curry, L. A., Snyder, C, R, Cook, D. L., Ruby, B. C., & Rehm, M. (1997). The role of hope in academic and sport achievement. *Journal of Personality and Social Psychology, 73*, 1257-1267.

Damon, W. (2004). What is positive youth development. *Annals of the American Academy of Political and Social Science, 591*, 13-30.

Hofer, J. (2006). Congruence between social values and implicit motives: effects on life satisfaction across three cultures. *European Journal of Personality, 20*(4), 305-324.

Kim-Cohen, J., Moffitt, T. E., Caspi, A., & Taylor, A. (2004). Genetic and Environmental Processes in Young Children's Resilience and Vulnerability to Socioeconomic Deprivation. *Child Development, 75*(3), 651-668.

Koolhaas, J. M., de Boer, S. F., & Buwalda, B. (2006). Stress and adaptation. Toward ecologically relevant animal models. *Current Directions in Psychological Science, 15*(3), 109-112.

Lackaye, T., & Margalit, M. (2006). Comparisons of achievement, effort and self-perceptions among students with learning disabilities and their peers from different achievement groups. *Journal of Learning Disabilities, 39*(5), 432-446.

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 & Practice, 21*(2), 111-121.

Lane, T. (2006). The motivation complex: a tribute to James G. and Jessie L. Miller. *Systems Research and Behavioral Science, 23*(3), 395-408.

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development, 71*(3), 543-562.

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

Margalit, M. (1999). Resiliente kinder mit lernstorungen (Resilient children with learning disabilities). In G. Opp, M. Fingerle & A. Freytag (Eds.), *Was kinder starkt - erziehung zwischen risiko und resilienz* (pp. 204-220). Munchen: Reinhardt Verlag.

Margalit, M. (2003). Resilience model among individuals with learning disabilities: Proximal and distal influences. *Learning Disabilities Research & Practice, 18*(2), 82-86.

Margalit, M. (2004). Second-generation research on resilience: Social-emotional aspects of children with Learning Disabilities. *Learning Disabilities Research & Practice, 19*(1), 45-48.

Margalit, M., & Efrati, M. (1995). Loneliness, coherence and companionship among children with learning disorders. *Educational Psychology, 16*(1), 69-79.

Margalit, M., Leyser, Y., Ankonina, D. B., & Avraham, Y. (1991). Community support in Israeli kibbutz and city families of disabled children: Family climate and parental coherence. *Journal of Special Education, 24*, 427-440.

Masten, A. S. (2001). Ordinary magic: resilience processes in development. *American Psychologist, 56*, 227-239.

Meltzer, L. J., Reddy, R., Pollica, L. S., Roditi, B., Sayer, J., & Theokas, C. (2004). Positive and negative self-perceptions: Is there a cyclical relationship between teachers' and students' perceptions of effort, strategy use, and academic performance? *Learning Disabilities Research and Practice, 19*(1), 33-44.

Mikulincer, M., & Florian, V. (2001). Attachment style and affect regulation: Implications for coping with stress and mental health. In G. Fletcher & M. S. Clark (Eds.), *Blackwell handbook of social psychology: Interpersonal processes* (pp. 537-557). Oxford, England: Blackwell.

Miller, J. G. (2005). Essential role of culture in developmental psychology. *New Directions for Child and Adolescent Development, 2005*(109), 33-41.

Morrison, G. M., & Cosden, M. A. (1997). Risk resilience and adjustment of individuals with learning disabilities. *Learning Disabilities Quarterly, 20(1)*, 43-60.

Olsson, C. A., Bound, L., Burns, J. M., Wella-Brodrick, D. A., & Sawyer, S. A. (2003). Adolescent resilience: A concept analysis. *Journal of Adolescence, 26*, 1-11.

Peplau, L. A., & Perlman, D. (1982). Perspectives on loneliness. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 1-18). New York: Wiley.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.

Shorey, H. S., Snyder, C. R., Rand, K. L., Hockemeyer, J. R., & Feldman, D. B. (2002). Somewhere Over the Rainbow: Hope Theory Weathers Its First Decade. *Psychological Inquiry, 13*(4), 322–331.

Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry, 13*(4), 249-275.

Snyder, C. R., Feldman, D. B., Shorey, H. S., & Rand, K. L. (2002). Hopeful choices: A school counselor's guide to hope theory. *Professional School Counseling, 5*(5), 298-308.

Snyder, C. R., Lopez, S. J., Shorey, H. S., Rand, K. L., & Feldman, D. B. (2003). Hope theory, measurement, and applications to school Psychology. *School Psychology Quarterly, 18*(2), 122-139.

Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology, 86*(2), 320–333.

Van de Vliert, E., Huang, X., & Parker, P. M. (2004). Do colder and hotter climates make richer societies more, but poorer societies less, happy and altruistic? *Journal of Environmental Psychology, 24*(1), 17-30.

Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation.* Cambridge, MA: MIT Press.

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*(2), 68-76.