LEARNING DIFFICULTIES, SOCIAL COMPETENCE, AND LONELINESS

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Abstract: Flexible goal-directed learning and ability to lifelong learning are fundamental human capacities. They enable our adaptation to a wide variety of environmental changes. These human capacities may be severely hampered with children with cognitive, emotional and social problems. These children are at high risk of school failure, and at consequent danger of early school leave or of difficulty in accessing prospective education. Estimates on developmentally significant learning problems agree that about 15-20% of children suffers from such problems during the school career. Developmentally significant learning difficulties vary from very specific disabilities, e.g., in language or auditory discrimination process, to problems in higher order cognitive functions, as comprehension and problem solving. Typical to learning difficulties is their cumulative nature. In confronting the rapid introduction of new skills in school, at-risk children tend to begin to fall increasingly behind their normally achieving classmates. The modern notion of learning difficulty or disability is no more limited to cognitive functioning alone. Cognitive competence is associated with children's emotional and motivational competence, and has also wider social dimensions, as loneliness, self-esteem and social skills, which contribute to learning and motivation processes. In this presentation, I will focus on associations between learning difficulties, loneliness and social competence, and give some examples of results with young, 4th grade elementary school students in mainstream education and in special schools for learning disadvantaged students.

Key words: Cognitive partnership, Learning difficulties, Loneliness, Social competence.

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Typical to learning difficulties is co-morbidity and accumulation. In confronting the rapid introduction of new skills in school, at-risk children tend to begin to fall increasingly behind their normally achieving classmates. In this connection, Keith Stanovich (1986) talks about a 'Matthew effect'. This effect was clear, for example, in the results of our earlier longitudinal study on reading comprehension of elementary school students (Vauras, Kinnunen, & Kuusela, 1994). The gap between the good and the poor readers increased substantially during the two years, from the 3rd to the 5th grade. In fact, the poor readers' text comprehension strategies did not develop at all, whereas all other students' skills improved (Vauras et al., 1993).

The learning is cumulative also in another sense. Learning difficulties seem to generalize in the course of schooling, and, thus, co-occur in different skill areas. Early reading and writing problems may later manifest as difficulties in reading comprehension, composition, foreign language learning and mathematics. The accretion of higher order learning difficulties was also evident in our latest research, Quest of Meaning – project, involving over 1000 4th grade elementary school students (see Fiqure 1).

The modern notion of learning difficulty or disability is no more limited to cognitive functioning alone. Several studies show, how cognitive competence is associated with children's motivational competence, and has also wider social dimensions, as loneliness, self-esteem and social skills, which contribute to learning and motivation processes. Long-term, stabilized deprecatory self-esteem and social incompetence may severely interfere with students' ability to benefit from instruction. Thus, understanding the close association between

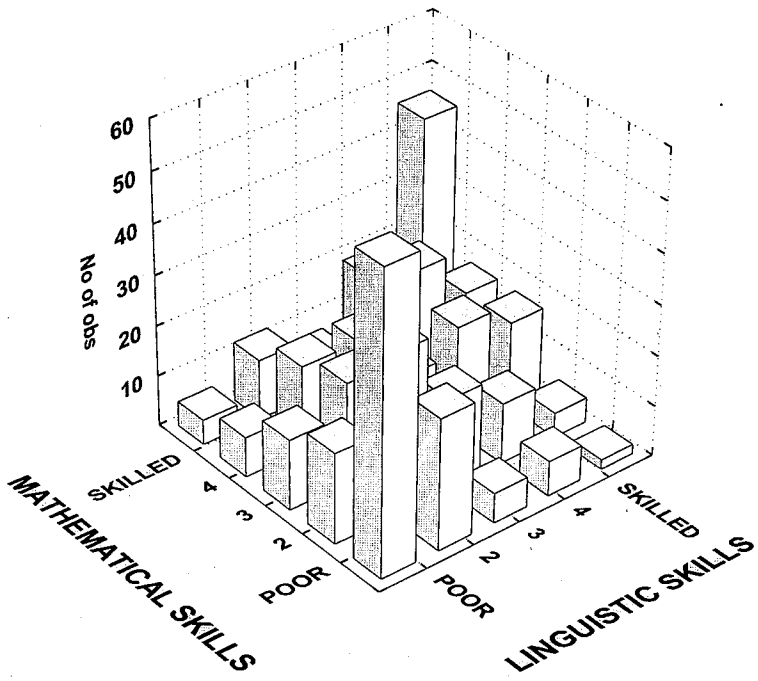

Figure 1. The accumulation of mathematical and linguistic learning difficulties in 4th grade elementary school students.

Notes. Mathematical skills included number concept, arithmetic skills and word problem solving, and *linguistic skills* included decoding, spelling and reading comprehension.

emotional and social vulnerability and learning difficulties is important for supplementing any successful educational intervention or teaching procedures.

This argument becomes more visible if we think of modern views on learning. Rooted in Vygotskian ideas (e.g., Vygotstky, 1978), current socio-cognitive theories of learning emphasize the social mediation of knowledge and skills. Through guided participation (Rogoff, 1990) the learner gradually internalizes knowledge and skills, and, consequently, other-regulation progressively transfers to self-regulation. We can talk about *cognitive partnership* (Perkins, 1993). Although cognitive partnership is often described between unequal participants, like across parent and child, or teacher and student, contemporary researchers have shifted more attention also to egalitarian cognitive partnerships between peers.

The key element in learning is thus, *interactivity*, and terms like negotiation, argumentation, collaborative inquiry, and supportive communication

reflect the social processes involved in cognitive partnerships. This kind of interaction is not defined quantitatively, e.g., as a frequency of interactions, but by the extent to which these interactions influence the others' cognitive processes (Dillenbourg, 1999, p. 12). It is easy to see that transactive cognitive partnerships require sophisticated social and communication skills, like inter-subjectivity and abilities to understand the partner's point of view, to communicate own views, to give unambiguous messages, to actively listen, to plan ahead, and to inhibit own actions (see Ding & Flynn, 2000). One very distinct feature of successful collaboration seems to be *openness*, that is, non-defensive ways of reacting, for example, to own misinterpretations or failures and to others' help and guidance. One has to be, also, ready to openly communicate own lack of comprehension, to ask help if needed, to give help in a friendly but adept manner, to be ready to listen and to take into account the others' opinions, and to dissolve disagreements without sense of personal threat. This non-defensiveness opens the space for mutual problem solving and learning (Vauras, Iiskala, Kajamies, Kinnunen, & Lehtinen, 2003).

But how socially and emotionally competent young learners are? Can we detect a wider Matthew effect, which is reflected in self-esteem, loneliness and social skills, between the cognitively skilled learners and their less skilled peers? American studies (see, e.g., Swanson & Malone, 1992) clearly show that children with learning disabilities have lower social acceptance than their peers without handicaps, and social skills is an important correlate of the behavior characteristics of learning disabilities. Whether social skills are primary or secondary characteristic of learning disabilities, however, awaits further investigation. It is important to note that although American definitions of learning disabilities somewhat vary, they are very strict, and are typically considered as neurological disorders. Special education services are offered to approx. 5% of all school-aged students in public schools (e.g., http://www.ncld.org). These facts are important to note, when we compare studies from different countries. In Finland, it is more correct to talk about learning difficulties, since our definition of learning disability is broad and contractual. The school laws state that students with even minor learning difficulties are entitled to support services and special education, irrespective of whether the reasons are genetic, neurological, or developmental.

Next, we present some recent results of our studies from the Quest of Meaning – project on associations between learning difficulties, loneliness and social competence, and give some examples of results with young, 4th grade elementary school students in mainstream education.

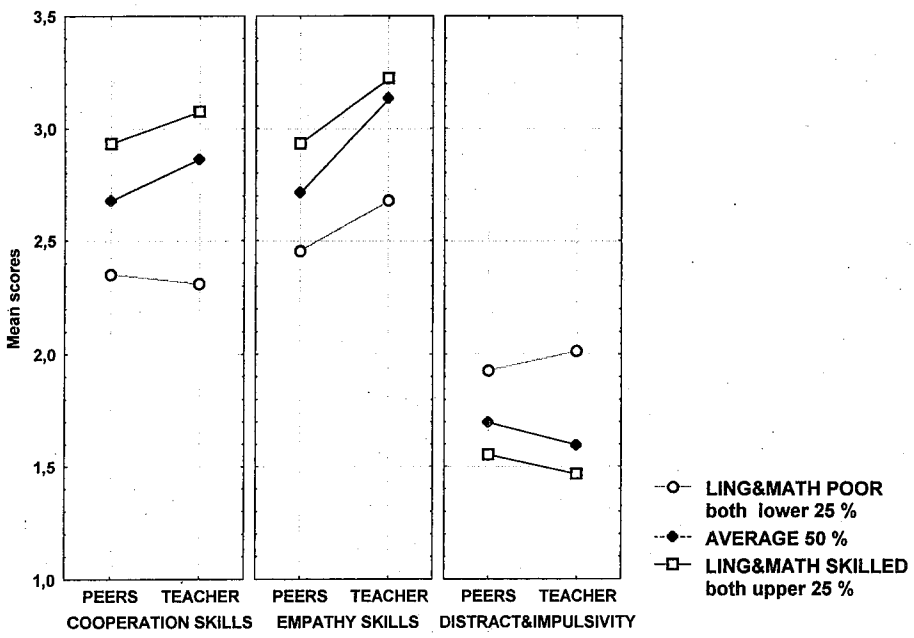

Figure 2. Social competence in different learner groups as assessed by peers and teachers in school context.

Let us first take a look at students' *social competence*. Social competence was rated by a modified School Social Behavior Scale by Merrell (1993), and included four dimensions: cooperation skills, empathy, impulsivity and distract behavior. As we can see in Figure 2, teacher and peer ratings are very similar, and clearly indicate that students with poor linguistic and mathematical skills differ from average and skilled students in all social skill dimensions. Particularly, poor students' cooperation skills are systematically lower than these of the other students.

Loneliness (see, e.g., Uhlendorff, 2000) is an issue that gained renewed research interest after the repression years in the beginning of 1990s, when its detrimental personal and social consequences became obvious. However, little is yet known about associations between loneliness and learning difficulties. We can well assume that loneliness is associated with social competence, particularly in such cases where being alone is not self-chosen and –accepted (e.g., Asher & Wheeler, 1985; Clinton & Anderson, 1999). We used students' self-ratings on social and emotional loneliness at three time-points within one year. We applied a modified version of Peer Network and Dyadic Lone-

liness Scale by Hoza, Bukowski, and Beery (2000). Subjective feeling of loneliness is typically associated with self-depressing emotions like anxiety, emptiness, sense of rejection, and isolation (e.g., Bucholtz & Catton, 1999; Jong-Gierveld & Raadschelders, 1982; Weiss, 1973).

Although not overly strong, all correlations between social skills and loneliness were significant. Previous studies indicate that problems in social skills and loneliness are intimately associated with linguistic problems (e.g., Margalit, Tur-Kaspa, & Most, 1999; Pavri & Monda-Amaya, 2000). It is speculated that problems in linguistic processing are linked, on the other hand, to inability to engage in social behaviors that draw upon these skills (e.g., verbal interchange with a peer), and, on the other hand, to the social rejection and isolation from the part of the peers (e.g., intolerance to weak verbal communication). In this kind of vicious interaction, there is little room left for learning social skills (see Horowitz, French, & Anderson, 1982). Our results are partly in accordance with these results. Students with only marked difficulties in mathematics did not differ from average or skilled students in loneliness. However, we could again detect a clear cumulating effect of learning difficulties and social problems. Students with linguistic difficulties or linguistic plus mathematical difficulties are, on average, lonelier both socially and emotionally.

All in all, accumulation of learning, social, and emotional disadvantage is significant. This becomes visible in the Figure 3, where the average profiles of different learners in regard to social skills, loneliness, and self-esteem are shown. The profile of the skilled students is like a mirror image to the students with linguistic and mathematical difficulties. The disadvantages of the latter group are evident in social competence assessed by their peers and teachers as well as their personal sense of loneliness and self-esteem.

Before concluding, it is important to realize that the population of students with learning difficulties is heterogeneous with respect to social and emotional competence. Despite strong association, we cannot claim that depression in this competence is an integral part of learning difficulty. Only poor cooperation skills seem rather consistently to co-occur with cognitive disadvantage, whereas in other respects very different socio-emotional profiles can be found. However, in a significant portion of cognitively disadvantaged students, the accumulation of wider social and emotional problems in different forms is evident. A lot of being "badly off" strengthens.

What practical implications the analyses, as presented here, have for school psychologists and teachers? Below, some implications are outlined.

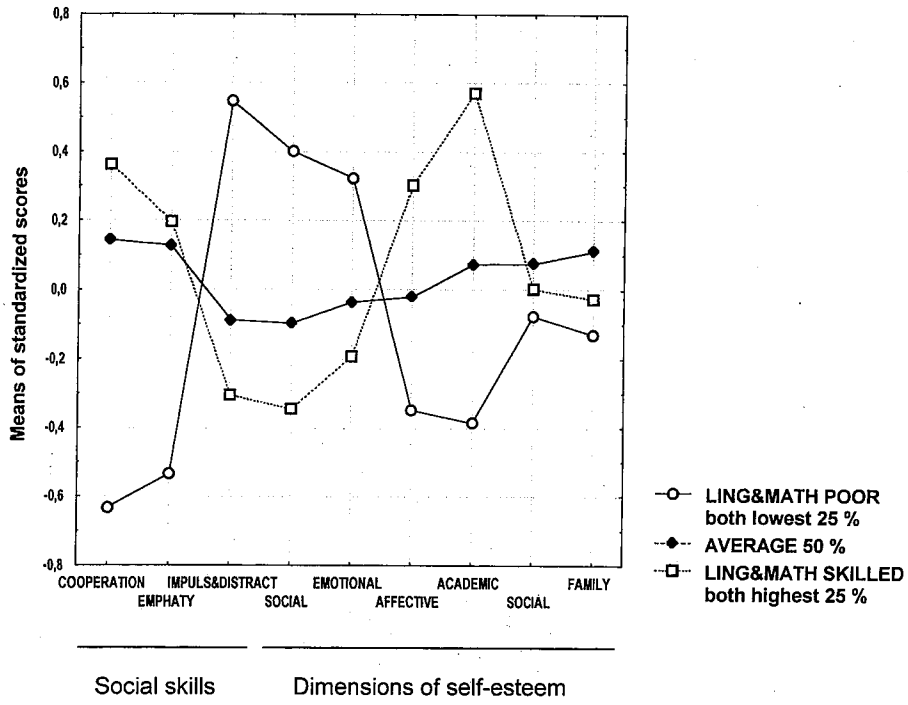

Figure 3. Accumulation of social and affective problems in 4th grade elementary school students.

The results of our studies and of other research groups clearly suggest that for elementary school students suspected to have severe learning difficulties, peer and teacher ratings reliably discriminate such students from their peers without handicaps. Self-ratings on loneliness and self-esteem seem also reasonably reliable. Therefore, the measures on social competence, loneliness, and self-esteem, coupled with others, are useful in the assessment process.

Assessment, which carefully taps also social and emotional competence of young students with learning difficulties, serves the design of powerful supportive interventions and learning environments for different learners. This emphasizes the close, networked cooperation between professionals like psychologists, teachers and special teachers. To powerfully support the development of students with learning difficulties, the construction of social competence and relations, and self-esteem and self-efficacy must be coordinated with training of cognitive and self-regulation skills. This cultivation of competence cannot be solely achieved in psychological rehabilitation apart from

daily classroom work, but should be integrated in classroom learning. For example, collaborative learning presupposes not only mutual appropriation of knowledge and meaning, but also mutual scaffolding and guidance among learners (King, 1998). We cannot expect that young students acquire complex social skills and emotional competence involved in collaboration and mutual scaffolding without any help and guidance. A lonely, withdrawn, and low confident girl is not less likely than an impulsive, harassing, and unrealistically confident boy to suddenly mature into a socially competent learner by themselves. To become a competent learner, a young child has to acquire a vast array of multidimensional human capabilities, of which not the least are the constructive social interaction and cooperation competencies.

REFERENCES

Asher, S. R., & Wheeler, V. A. (1985). Children's loneliness: A comparison of rejected and neglected peer status. *Journal of Consulting and Clinical Psychology, 53*, 500-505.

Buchholz, E. S., & Catton, R. (1999). Adolescents' perceptions of aloneness and loneliness. *Adolescence, 34*, 203-213.

Clinton, M., & Anderson, L. R. (1999). Social and emotional loneliness: Gender differences and relationships with self-monitoring and perceived control. *Journal of Black Psychology, 25*, 61-77.

Dillenbourg, P. (1999). Introduction: What do you mean by "collaborative learning?" In P. Dillenbourg (Ed.), *Collaborative learning. Cognitive and computational approaches* (pp. 1-19). Amsterdam: Pergamon/Elsevier.

Ding, S., & Flynn, E. (2000). Collaborative learning: An underlying skills approach. In R. Joiner, K. Littleton, D. Faulkner, & D. Miell (Eds.), *Rethinking collaborative learning* (pp. 3-18). London: Free Association Books.

Horowitz, L. M., French, R. D. S., & Anderson, C. A. (1982). The prototype of a lonely person. In L. A. Peplau & D. Perlman (Eds.), *Loneliness. A sourcebook of current theory, research and therapy* (pp. 183-205). New York: Wiley.

Hoza, B., Bukowski, W. M., & Beery, S. (2000). Assessing peer network and dyadic loneliness. *Journal of Clinical Child Psychology, 29*, 119-128.

De Jong-Gierveld, J., & Raadschelders, J. (1982). Types of loneliness. In L. A. Peplau & D. Perlman (Eds.), *Loneliness. A sourcebook of current theory, research and therapy* (pp. 105-119). New York: Wiley.

King, A. (1998). Transactive peer tutoring: Distributing cognition and metacognition. *Educational Psychology Review, 10*, 57-74.

Margalit, M., Tur-Kaspa, H., & Most, T. (1999). Reciprocal nominations, reciprocal rejections and loneliness among student with learning disorders. *Educational Psychology, 19*, 79-90.

Merrell, K. (1993). Using behaviour rating scales to assess social skills and antisocial behaviour in school settings: Development of the school social behaviour scales. *School Psychology Review, 22*, 67-74.

Pavri, S., & Monda-Amaya, L. (2000). Loneliness and students with learning disabilities in inclusive classrooms: Self-perceptions, coping strategies, and preferred interventions. *Learning Disabilities Research and Practice, 15*, 22-33.

Perkins, D. (1993). Person-plus: A distributed view of thinking and learning. In G. Salomon (Ed.), *Distributed cognitions: Psychological and educational considerations* (pp. 88-110). Cambridge, UK: Cambridge University Press.

Rogoff, B. (1990). *Apprenticeships in thinking: Cognitive development in social context*. New York: Oxford University Press.

Stanovich, K. (1986). Matthew effect in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21*, 361-406.

Swanson, H. L., & Malone, S. (1992). Social skills and learning disabilities: A meta-analysis of the literature. *School Psychology Review, 21*, 427-43.

Uhlendorff, H. (2000). Parents' and children's friendship networks. *Journal of Family Issues, 21*, 191-204.

Vauras, M., Iiskala, T., Kajamies, A., Kinnunen, R., & Lehtinen, E. (2003). Shared regulation and motivation of collaborating peers: A case analysis. *Psychologia: An International Journal of Psychology in the Orient, 46*, 19-37.

Vauras, M., Kinnunen, R., & Kuusela, L. (1994). Development of text-processing skills in high-, average- and low-achieving primary school children. *Journal of Reading Behavior, 26*, 361-389.

Vygotsky, L. S. (1978). *Mind and society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

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