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Following the chapter from Professor Andreas Schleicher about the PISA study which appeared in 'Improving the Quality of Childhood in Europe 2011' with regard to students' social skills and their well-being we invited Professor Pulkkinen to write this chapter as a contribution to our continuous dialogue in this area.

The Integrated School Day - improving the educational offering of schools in Finland

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ABSTRACT

The term Integrated School Day (ISD) refers to a school day in which extracurricular activities and children's care are organized at the school before and after lessons, and sometimes between lessons. In a three year project, the extracurricular activities consisted of two types of activities for each child as selected by the parents and child: 1) adult-supervised, mostly self-organized recreation and indoor and outdoor activities in the morning before school hours and/or in the afternoon after school hours, and 2) hobby clubs available for children to attend a few times per week to enrich the activities offered in the morning and afternoon. Seven schools with students in grades 1 - 9 (from age 7 to 15) participated in the 3 year ISD project. Activities organized at school significantly reduced the amount of unsupervised time spent by children. They also increased students' satisfaction with school as estimated by 89% of teachers. In lower grades (from 1 to 4, ages 7 to 10), children who participated in the ISD programme for three years showed lower incidence of internalizing problem behaviours such as anxiety than children in schools where this programme was not available. In middle grades (from 4 to 6, ages 10 to 12), participation in arts and crafts and music was related to children's higher prosocial behaviour, academic achievement, and working skills such as concentration and persistence. The chapter also describes the process which resulted in the school research project, and a collaboration of a researcher with politicians. The process affected Finnish school legislation. From the autumn of 2004, the law mandated that supervision of children's activities in the mornings and afternoons should be available for all first- and second-grade children and should be financially supported by the government.

WHY IMPROVE THE FINNISH SCHOOLS?

For ten years the excellent Programme for International Students Assessment (PISA) results achieved by Finnish students, described by Professor Andreas Schleicher in the book "Improving the Quality of Childhood in Europe 2011," have evoked world-wide surprise and interest. Therefore, the title of the present article may sound overambitious. I argue, however, that the Finnish schools, in order to improve students' social skills and well-being, still need to be improved.

Non-routine interactive skills needed in the future

Schleicher mentions in his article that an OECD team has listed skills that are required by today's employers and has compared them with the skills that are taught at school. The skills identified for the U.S.A. are: routine manual, non-routine manual, routine cognitive, non-routine analytic, and non-routine interactive skills. Jobs in which routine manual or routine cognitive skills are needed are declining because these jobs are done more effectively by machines and computers. Non-routine manual work done by hand is always needed, and there is a fast growing demand for non-routine analytic and, particularly, non-routine interactive skills.

The non-routine analytic skills, which have been assessed by PISA, comprise the application of knowledge in new settings. Non-routine interactive skills concern the capacity to communicate, collaborate, manage, and resolve conflicts. Schleicher remarks that these are the most difficult to teach and measure, and that in spite of the demand for new skills the standard school has changed very little.

In this article, I introduce some ideas about how the learning of non-routine interactive skills could be increased in schools and how these could be assessed. The article summarizes my previous publications on this topic as listed in the references at the end of this chapter. I present a framework for the description of children's socio-emotional behaviour and interactive skills. This model has guided my longitudinal study in which the development of the same individuals has been followed for 42 years. Furthermore, I present an intervention study in which findings of the longitudinal study have been applied to schools. Before introducing these empirical studies I will first describe the Finnish education system and problems with students' well-being, and the support received from politically influential people who were instrumental in the furtherance of the work to improve the quality of children's lives.

The Finnish education system

The age at which children start school is 7 years, and therefore, children have more time for free play and child-directed activities compared to countries in which children begin school at an earlier age. The PISA results confirm that the late school starting age is not a disadvantage.

The strength of the Finnish education system is the comprehensive school which children from the first to the ninth grade attend without different streams or great differences between schools. Teachers are trained to work with heterogeneous groups. The school day includes a warm lunch, supervised by teachers; in Finnish schools, students have received free lunches for 50 years. No tuition fees are charged at any level of the education system. Physical punishment at school has been forbidden for almost a hundred years. Repeating a grade is possible but rare due to its socio-emotional disadvantages to children. The age at which children start school is 7 years, and therefore, children have more time for free play and child-directed activities compared to countries in which children begin school at an earlier age. Empirical studies have shown that when the child is cognitively and neurologically mature (at age 7) learning takes place faster. Earlier training does not result in a permanent proficiency. The PISA results confirm that the late school starting age is not a disadvantage.

Finnish schools are oriented towards learning and teaching, although schools must also "support the students' growth as humane and ethically responsible members of society and give them knowledge and skills that are useful in life," as stated in the Basic Education Act, 1998. This objective involves goals for socio-emotional development that cannot be reached simply through formal education. Research has shown that Finnish schools have much to do to reach these goals.

Schools are unique social institutions because they reach the entire age cohort of children, as well as their families. Therefore, they should be forums for developing cooperation, mutual trust, and shared values.

Knowledge does not necessarily lead to an understanding and valuing of the kind of behaviours that are needed to achieve certain social goals. For instance, students' civic knowledge about democracy, national identity, international relations, and social cohesion was not connected with their conceptions of an adult who is a good citizen as shown by a study by the International Association for the Evaluation of Educational Achievement (IEA) based on a comparison of 14-year-old students in 28 countries (Torney-Purta et al., 2001). Knowledge was assessed by questions such as "Identify the function of having more than one political party." Response alternatives were: A. to represent different opinions (interests) in the national legislature (Parliament), B. to limit political corruption, C. to prevent political demonstrations, and D. to encourage economic competition. Conceptions of civic activities were elicited by questions such as "An adult who is a good citizen... takes part in activities promoting human rights; ...votes in every election." Responses were given on a four-point scale ranging from very important to very unimportant. While being among the best students in civic knowledge, Finnish students were among the poorest in valuing civic activities. For comparison, Chilean students were among the poorest in civic knowledge but among the highest in valuing civic activities, Greek students were high in both, and French-speaking Belgian students were low in both. As Europe is becoming increasingly multicultural and complex, more is demanded in terms of valuing those activities which

promote democracy and human rights. Schools are unique social institutions because they reach the entire age cohort of children, as well as their families. Therefore, they should be forums for developing cooperation, mutual trust, and shared values.

Several analyses uniformly show that in spite of the good academic results that they achieve Finnish students are not satisfied with school. It has been found by PISA that the working climate of schools was not rated as better in Finland than in those European countries where PISA results were poorer (Väljärvi & Linnakylä, 2002), and that Finnish students' school engagement and satisfaction were below average when compared to 30 other OECD countries (Kupari & Väljärvi, 2005). Findings based on the Health Behaviour in School-Aged Children study, which is a World Health Organization (WHO) collaborative cross-national study, also show that negative attitudes towards school are common among 13 to 15-year-old Finnish students who do not enjoy school activities, or going to or being at school (Haapasalo et al., 2010). Likewise, according to a UNICEF (2007) overview of child well-being in rich countries, only 8.0% of Finnish students liked school a lot when the mean of the OECD countries was 23.3%; the percentage for the Finnish students was lowest and that for Norway highest (38.9%).

School days which include only lessons do not leave time for personal interactions between students and teachers. After lessons students go to a home in which in most cases there are no adults present. Many children suffer from loneliness

Positive academic results in PISA have been enjoyed by the Finnish school authorities. Negative results in terms of students' satisfaction with school were discussed at a conference organized in 2008 on children's wellbeing at school. It was argued that students need more personal contact with teachers at school. The school day is busy and leaves little time for informal communication even with other students. The teacher-student relationship is associated with the way school work is organized. Teachers are paid for lessons they provide. If they do something extra such as meet with parents they are paid extra. School days which include only lessons do not leave time for personal interactions between students and teachers. After lessons students go to a home in which in most cases there are no adults present. Many children suffer from loneliness (Junttila, 2010). According to several estimations (e.g., Bardy et al., 2001), almost one-fifth of Finnish school children have alarmingly high levels of mental and behavioural problems that threaten their capacity to function within society. Thus, evidence indicates that despite good academic achievements in Finnish schools, there is still a need to improve students' well-being and satisfaction with school.

Support from the First Lady

I had been worried about children's loneliness and talked about it to various audiences, particularly, in the early 1990s when children's loneliness increased due to a severe economic recession in Finland and consequent cutting of services. Municipalities had offered afternoon care for first-graders in day care centres, but these services were cut.

Teachers had supervised hobby clubs on extra pay, but this money was cut. A researcher's concerns do not, however, easily lead to innovative changes in an existing system. Collaboration with politically influential people is needed to increase the public's awareness of problems, as the following sections of this chapter show.

In 1996, Mrs. Eeva Ahtisaari, the spouse of Mr. Martti Ahtisaari, Nobel Peace Prize Laureate, then President of Finland, asked me to give a talk at the President's Residence to a small group of people about a family-related matter that I was worried about. I chose the topic of children's loneliness. In this talk (published in Pulkkinen, 2002), I spoke about children's loneliness and the historical, societal, and cultural factors underlying it. I mentioned that these concerns may look trivial in the midst of the then prevailing serious economic recession, unemployment, and other social problems, but I argued that they may have serious consequences for children's development and well-being.

Lonely afternoons mean a lack of interaction with adults, a lack of supervision of activities, and emotional insecurity.

I linked historical reasons for children's loneliness to the tradition of the Finnish school system which was based on the German school system, comprising a half-day school structure. The school was established to support families in teaching children basic skills, and this model suited a farming culture in which family members worked at home. However the half-day model in an industrialized economy leaves children without supervision when both parents work outside the home. The school week for younger children is only about 20 hours long, but parents work 37 to 40 hours per week. The school has not changed to meet the needs of families, in spite of changes to the economy.

I associated societal factors with parents' work culture and the inadequate services supporting parents' work. All children under school age have an unconditional legal right to day-care services for the whole day (and also overnight if parents work inconvenient hours), but such services end when children start school in the autumn of their seventh year. Some 85% of the mothers of school-aged children are employed. Typically, both Finnish parents work full time and parents of small children work inconvenient hours more often than other workers, i.e. in the evening, at night, or during the weekends. The work-orientation of parents is caused by economic reasons: families with children are taxed more heavily in Finland than in most European countries. Most families live in privately owned dwellings which are expensive to afford. As a consequence, children, even in the first grade, return to a home where there is no adult present, perhaps for several hours. Lonely afternoons mean a lack of interaction with adults, a lack of supervision of activities, and emotional insecurity.

I associated cultural factors with the poor coordination of cultural services from the point of view of family life. If supervision of hobbies is available for children and youth in the afternoons, there is a lack of coordination of school hours with club hours causing many

problems for participation. Mostly hobby clubs are, however, in the evenings, not in the afternoon when children have a need for supervision and would have time to attend them. When parents return home children go to their hobbies, and often need their parents to transport them there. Consequently, there is very little time for families to spend together. Recent findings validate this argument when they show that the percentage of students whose parents eat their main meal around a table with their 15-year-old children several times a week is 59.8% in Finland, when the mean in the OECD countries is 79.4%. The percentage was lowest for Finland and highest (93.8%) for Italy (UNICEF, 2007). Shared family mealtimes are associated with language development, academic achievement, and reduced risk of substance abuse and obesity (Fiese & Schwartz, 2008).

These historical, societal and cultural factors affect parenting. Parents tend to overestimate their children's independence while leaving them to cope alone daily. There is often no other option. Instead of thinking about possible problems, parents try to be proud of their children's independence. There is no law in Finland that would prohibit children under the age of 12 being left alone. The independence of school aged children is highlighted by, for instance, health services which they can use without informing their parents. Professional confidentiality hinders health service professionals from making contact with parents. Children are left alone with difficult emotional problems. It has been found repeatedly in different studies that Finnish children, even in upper secondary school, wish for more contact and to spend more time with their parents.

In my talk in 1996, I hoped that children's loneliness would be observed by OECD rapporteurs; and that their subsequent critique would have an impact on Finnish decision makers. I also proposed a careful national analysis of the extent of the problem and the possibilities for changing the length and structure of a school day to make the triangle of school, home, and work function in a way which meets children's needs. I also proposed that shortened working days would be made possible for the parents of children attending lower elementary school.

Research findings had shown that 10 unsupervised hours per week increases the risk of depression, substance abuse, and school failure in adolescents aged 14 years old (Richardson et al., 1993), but in Finland even 7-year-old children spent more than 10 hours per week on their own

This talk was cited in the main Finnish newspaper and it aroused an active discussion in which I was mostly ridiculed by journalists and the students and parents who were interviewed. Research arguments on the negative effects of the lack of adult supervision which I, in turn, presented in the media increased, however, the awareness of the problem. Research findings had shown that 10 unsupervised hours per week increases the risk of depression, substance abuse, and school failure in adolescents aged 14 years old (Richardson et al., 1993), but in Finland even 7-year-old children spent more than 10 hours per week on their own. Lonely children seek support from and attachment with their peers,

spend time on screen (computer games, the internet, DVDs, television), and become vulnerable to both their peers' and on-screen role models.

The most important step was reached when Mrs. Eeva Ahtisaari, the First Lady of Finland at the time, started to work on this issue. She became a leading public figure in the fight against children's loneliness. In 1997 and 1999, we organized together panel discussions in schools with invited speakers from administrators, bishops, business leaders, trade unions, and the media. The media reported on these events.

Support from the Finnish Members of Parliament

As the result of the increased public awareness of children's unsupervised time, the Ministry of Education requested the National Board of Education in 1998 to analyze the status of club activities in schools. In its report, the Board acknowledged many problems. In years past, many schools offered club activities after regular school hours for older students, and municipalities offered afternoon care services within the day care system for first-graders. Club activities had, however, been reduced by more than half due to the economic recession in the 1990s, and day care services for school children were totally cut. International comparisons had shown that public services were available for 64% of children under 10 years old in Sweden and 62% in Denmark, but only 10% in Finland (Youthful Finland, 1998). The newly elected Finnish Government reacted to this problem in 1999 by including in its 4-year programme the extension and development of supervised activities for school-aged children.

As I had hoped, the OECD Country Note (2001) made a remark about the length of unsupervised time spent by Finnish school children. Consequently, the Ministry of Education established a committee in 2001 to propose to the government a means of organizing activities for children before and after school. The Committee Report (2002) acknowledged that about 70% of all first- and second-graders needed supervision before or after school hours, but only 30% of them received it. In response to public concerns, the arrangement of afternoon activities had been started by church, sports organizations, parents' associations, and municipalities. Larger towns, in particular, were unable to organize these activities. Schools rarely ran morning and afternoon activities, although school premises were sometimes used for them. After-school activities often took place outside of schools because the rental fees for the school buildings were too high for the organizers, if the community did not support these activities. The committee proposed that the school should serve as an activity centre and that shortened working hours should be established for parents.

New opportunities to address these problems were opened up by the visit of the Finnish Parliament's Committee for the Future to the University of Jyväskylä in the autumn of 2001. I had been asked to brief the members of the Committee about the results of my research. I presented to them the findings that can be found in the next section of this article.

On the following day, a Member of the Parliament (MP) who served on the Committee for the Future invited me to attend a meeting in the Parliament. He (Kyösti Karjula) led a group of some Members of the Parliament and representatives of major Finnish enterprises. The MP group shared concerns about school-aged children's increasing problem behaviours and poor manners. The group invited me to develop a project for school-aged children to enhance their socio-emotional development. It was an opportunity to show how the findings of my research could be applied to the promotion of children's development, and it was an opportunity to introduce reforms to shorten children's lonely afternoons after school.

The MP group helped me find funds for the intervention study. The project started in the following autumn (2002). The Patron of the project was the Speaker of Parliament, and the Chair of the Board was Minister of Education and, later, the Director of the National Board of Education. Some Members of the Parliament served as members of the Board and chaired the Executive Committee.

THE JYVÄSKYLÄ LONGITUDINAL STUDY OF PERSONALITY AND SOCIAL DEVELOPMENT

The research findings that I presented to the Finnish Parliament's Committee for the Future and the MP group were based on the Jyväskylä Longitudinal Study of Personality and Social Development (JYLS, see Pulkkinen, 2004). In this study, the same individuals, born mostly in 1959, have been followed up since 1968, at 8, 14, 20, 27, 36, 42, and 50 years of age.

Sample and methods

The original sample of the JYLS (196 boys and 173 girls) consisted of 12 entire school classes randomly drawn from urban and suburban areas of an ethnically homogeneous, Finnish-speaking, medium-sized town in central Finland. The sample studied in the latest data collection in 2009 (at age 50; $n = 271$) represented their whole age cohort born in 1959 with respect to marital status, number of children, education, unemployment rate, and occupational status when compared with data drawn from Statistics Finland. Data collection methods in childhood and adolescence were teacher ratings and peer nominations. In adulthood, personal interviews, inventories and medical examinations were used for data collectionⁱⁱ.

Framework for the study of socio-emotional behaviour

My early studies on children's aggressive behaviour had made me aware that only a small proportion of children were often aggressive, but I had only diffuse constructs, such as a "nice child", for describing children's positive behaviour and no theoretical framework for interpreting it. The study of prosocial behaviour had not yet begun in psychology in the 1960s when I prepared my doctoral dissertation. After an intensive period of reading and thinking I received an inspiration for the description of basic differences in children's socio-emotional behaviour, covering also prosocial behaviour.

I reasoned that the human brain allows for more variation in social behaviour than just the "fight or flight" response (aggressive attack or fearful escape) studied in animal learning experiments. A characteristic of human beings is that they can observe their own behaviour, intentions, and emotions and exercise control over their expressions. The idea of cognitive control of emotional behaviour was novel at that time in the study of psychology. Emotions were seen as states which were rather independent of cognitive processes. The study of emotional regulation started in the early 1990s. On the other hand, Aristotle had thought more than 2000 years ago that a good human life depended on active participation in social activities that constitute a civilized society. Such a life is based on a complicated system of socially learned emotions. The quality of one's life depends very much on whether an individual learns through education to feel these emotions in an appropriate manner (Knuuttila & Sihvola, 1998).

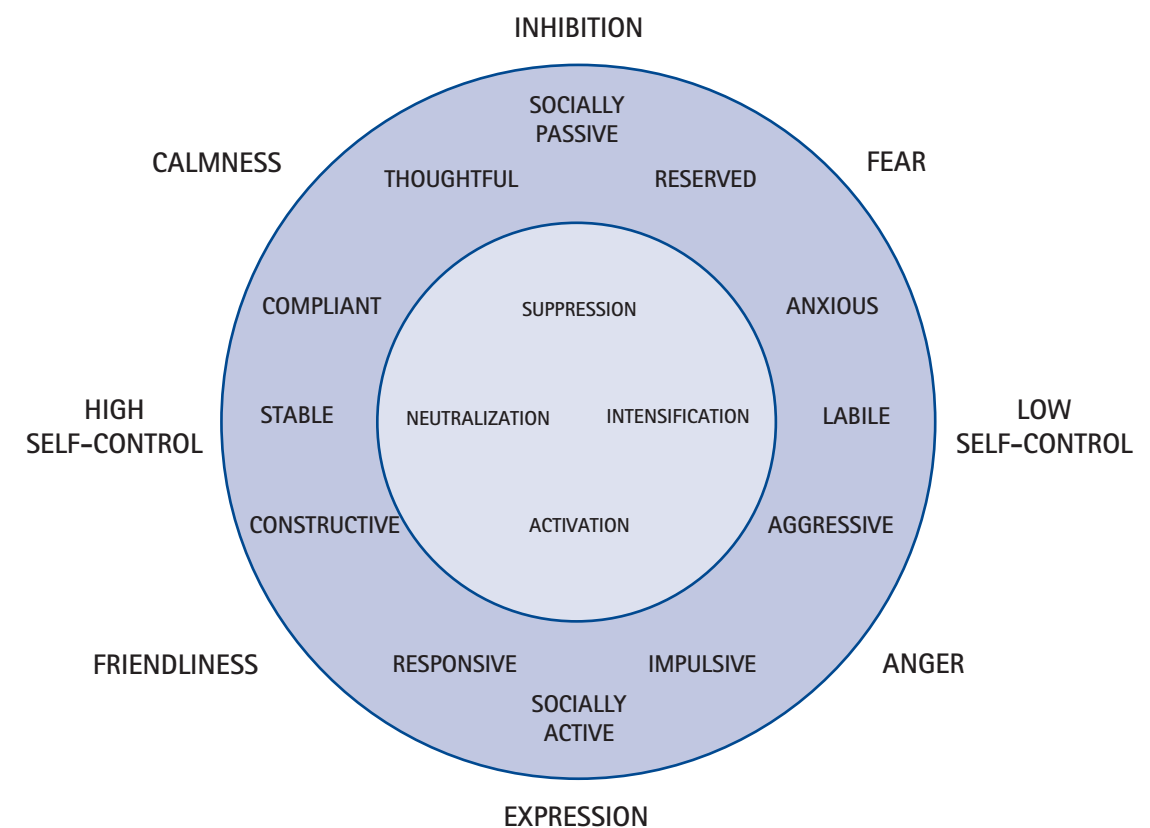


Figure 1. The model of emotional and behavioural regulation

In the descriptive model of emotional and behavioural regulation which I constructed (Pitkänen, 1969), two dimensions were suggested for the analysis of major differences in individuals' behaviour in an emotion-arousing situation. One dimension is constituted by a temperament dimension for behavioural activity (with passivity as the polar opposite), and another dimension by self-control which develops during the maturation process in the interaction with parents and other life experiences. Both active and passive behaviour may be more or less controlled. If activity is displayed with a low control of emotions, it may result in aggressive behaviour with underlying feelings of anger. On the contrary, if activity is displayed with a high control of emotions, it may result in socially constructive behaviour (e.g. negotiation, behaves reasonably in an annoying situation) with underlying feelings of friendliness. Likewise, if passivity is displayed with a low control of emotions it may result in anxious behaviour with underlying feelings of fear, but if passivity is displayed with a high control of emotions it may lead to compliant behaviour (e.g. patience) with underlying feelings of calmness.

In psychological literature, behaviour which is characterized by low self-control and social passivity (such as social anxiety) is called internalizing problem behaviour, and behaviour which is characterized by low self-control and social activity (such as aggression) is called externalizing problem behaviour. Behaviour which is characterized by high self-control and expressed in a socially active (constructive) or passive (compliant) way is called prosocial or adaptive behaviour. Behaviour which indicates high self-control is close to that described later by Goleman (1995) as "*emotional intelligence*: abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and to hope" (p. 34). Emotional intelligence includes self-awareness of the person in question, managing oneself emotionally, empathy, and as a result of these: skilled interaction. Likewise, in our intervention programme for supporting the development of self-control in kindergarten children (Pulkkinen et al., 1977), we highlighted understanding one's own feelings and reactions, other people's feelings and reactions, and social skills (meaning team work, sharing and taking turns, thinking of others, finding non-aggressive solutions to conflicts) (Pitkänen-Pulkkinen, 1977).

The model helps to analyze the quality of observed behaviour in a given situation. It does not present a typology of individuals, although some kind of behaviour may become more habitual for an individual than another kind of behaviour across situations. When children are small their capacity to control their behaviour is very limited. Children cry and express their needs immediately. When the child starts to move, the parents start to exert some control over his or her behaviour, and expect the child to remember restrictions and demands, such as, waiting for the satisfaction of needs. With increasing age children meet increasing demands on their behaviours, intentions, and emotional expressions. If no demands are placed on children, their self-control remains underdeveloped. Children need adults' help in meeting the demands and learning social norms and moral codes.

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The development of self-control starts during the first year of life. A regular rhythm in sleeping and feeding, secure attachment to the parents, positive mood, and consistent parenting advance its development. When children move to daycare, there is a risk that groups are too large for children to receive adequate personal supervision and guidance. This may lead to problems with self-control indicated by aggressive or anxious behaviour at the age when children might be able to behave in a more constructive or compliant ways if guided to understand other people's perspectives, control their behaviour, and behave positively towards other people.

Results of the Longitudinal Study

Clear differences in socio-emotional behaviour between children at the age of 8 years emerged. This aroused my interest in the follow-up of their development: does it matter for people's future how they behave socio-emotionally in childhood? The simple answer is: yes, it does matter.

The results of the JYLS have confirmed that socio-emotional behaviour in childhood and adolescence is linked in a statistically significant way to adult social functioning as a few research findings demonstrate (see Pulkkinen, 2009). Aggression in middle childhood (from age 6 to 12 years) predicts school maladjustment in early adolescence which may lead to disinterest in further education and an early onset of alcohol drinking. Low occupational alternatives and drinking problems make an individual vulnerable to long-term unemployment in adulthood. Childhood aggression also predicts aggression in middle age, a higher divorce rate, persistent criminal offending, a lower educational and occupational status, and problem drinking in middle age. On the other hand, high self-control in middle childhood as indicated by constructive and compliant behaviours is associated with positive health behaviour indicated by lack of drunkenness and smoking and a low body mass index, and non-criminality. Constructive behaviour, particularly, predicts positive personal partnerships, higher educational and occupational status, and higher income at age 42, and through career success, higher psychological functioning, as indicated by psychological well-being, a sense of coherence, and self-esteem.

It was striking to see that developmental background until adolescence was in a strong, linear relationship with social functioning at age 36 (Pulkkinen, 2004). *Successful social functioning* defined in terms of the stability of an individual's career path, controlled drinking behaviour, and good adjustment into society was associated with *favourable developmental background* at age 14. The latter consisted of high self-control, high school motivation, and good family circumstances including good relationships between the parents, the child's good relationship with the father, the mother's support and supervision,

the parents' low consumption of alcohol, and the lack of physical punishment. The family's socio-economic status contributed to the favourable background a little in males, but not at all in females, although it is common to equate favourable developmental background with high socio-economic status and prosperity.

Our findings have consistently shown that in Finland, where material equality is quite high compared to some other countries, psychological factors at home have more influence on children than material factors.

Our findings have consistently shown that in Finland, where material equality is quite high compared to some other countries, psychological factors at home have more influence on children than material factors. *Unfavourable developmental background*, as defined by low self-control and school motivation, adverse family circumstances including poor relationships between the parents and the father and the child, poor supervision by the mother, and parental drinking, was related to poor social functioning (unstable career, heavy drinking, antisocial behaviour). There were no individuals whose social functioning by age 36 would have reached the mean level, if the developmental background at age 14 was very poor. Correspondingly, there were no individuals whose social functioning would have been below the mean level, if the developmental background was very good.

These results raise the question of what could be done to prevent the fulfillment of the prophecy revealed by this basic study on the association between developmental background and social functioning. This question motivated me in the application of research findings to the improvement of the quality of children's lives. I was interested in working with parents for the betterment of parenthood and childhood. The invitation to design a project for schools led me to the thought that schools might be able to function as a protective factor for at-risk children, and be an additional resource factor for the well-being of all children.

INTERVENTION STUDY TOWARDS THE INTEGRATED SCHOOL DAY

Design

The programme for the enhancement of children's socio-emotional development at school that I was invited by the MP group to design was called MUKAVA (the acronym comes from Finnish words to remind adults about their responsibilities for raising and educating children) (Pulkkinen, 2004, 2005). The programme had several goals relating to

- (1) child protection (to decrease the amount of time pupils spend without adult supervision);
- (2) child development (to facilitate socio-emotional development); and
- (3) school as a learning environment (to strengthen the social capital of the school and children, i.e., networking, trust, and shared norms).

There were seven sub-projects in the programme. Two were targeted specifically at socio-

emotional development, one for kindergartens and the other for schools, associated with a new school subject: health education. Two sub-projects concerned the school as a learning environment. One of these was the integrated school day project and the other concerned teacher education. Three projects were designed to build the relationships between school and the outside world. There was a sub-project for increasing the cooperation between school and home, and two sub-projects for introducing students to working life and volunteering.

The Finnish Innovation Fund (SITRA) which agreed to fund the MUKAVA project, was interested in the sub-project called the Integrated School Day and focused its resources on this. Other sub-projects were run with more limited resources from other sources, but they remained significant. For instance, out of the project introducing students to working life a nation-wide system for assisting schools, students, and enterprises to network was developedⁱⁱⁱ.

The Integrated School Day

The term *Integrated School Day* (ISD) refers to a school day structure in which out of class (hereafter: extracurricular) activities and children's care are organized in the school context before and after lessons, and sometimes between lessons. At the beginning of the ISD project, we called it a *whole-day school* project, but since this term was understood among the general public as an obligatory lengthening of the school day, and among teachers as full-time work, both of which created resistance, we started to use the term integrated school day. There were some parents who were able to be at home and supervise their children in the afternoons at least during the first grade, and who loudly objected to the lengthening of the school day. In the Finnish system, teachers are paid for the class hours that they teach. Teachers' full-time work has been debated for years, but although the work load of all other teacher groups (including university professors) has been defined in terms of total hours (1600 hours) per year, no solution has been found for school teachers.

The extracurricular activities consisted of two types of activities for each child as selected by the parents and child (see Figure 2). First, "M/A" group activities were arranged. This meant adult-supervised, mostly self-organized recreation, and indoor and outdoor activities in the morning (M) before school hours and /or in the afternoon (A) after school hours, and sometimes also between school hours, such as during a lengthened lunch break. In the M/A groups, students were provided with snacks in the afternoon, and with the care they needed. Secondly, hobby clubs were made available for children to attend a few times per week to enrich the recreation offered in the M/A groups. The hobby-clubs involved goal-oriented activities (e.g., team sports, cooking, arts, and music). The M/A group activities and hobby clubs, both supervised by adults, differed in that the hobby clubs included skill-building and structure. Participation in both types of activities out of class hours was voluntary.

Studies show that parents want to be more involved with their children's education, and that school factors – especially teachers – have a primary influence on parental involvement. When parents feel schools are doing things to involve them, they are more involved in their children's education.

Parental involvement in the planning of activities was strongly encouraged. The aim of the parental involvement, also referred to by the concepts of partnership or empowerment, was to develop and facilitate better communication with families in order to facilitate success in school. Studies show that parents want to be more involved with their children's education, and that school factors – especially teachers – have a primary influence on parental involvement. When parents feel schools are doing things to involve them, they are more involved in their children's education.

	Current Situation		Integrated school day; out of class, optional M/A activities
	1. day	2. day	
7-9	lesson		supervised morning activity M
9-10	lesson		lesson
10-11	lesson	lesson	lesson
11-12	lesson	lesson	siesta & supervised activity
12-13		lesson	lesson
13-14			lesson
14-15			supervised clubs and
15-17			afternoon activities A

Figure 2. A proposal for the structure of an integrated school day

The arrangement of activities was planned on the basis of information provided by parents and children in annual questionnaires. The parents and children reported what kind of extracurricular activities the children had attended during the previous school year and what kind of activities they would like to participate in during the forthcoming school year. The schools were provided with financial resources from SITRA (the Finnish Innovation Fund) which enabled them to organize extracurricular activities. All children enjoyed an equal opportunity to participate, regardless of their parents' level of income.

A three-year ISD project

The ISD project was implemented in the academic years 2002–2003, 2003–2004, and 2004–2005 in four lower elementary schools (grades 1 to 6 for students aged 7 to 12 years) and three higher elementary schools (grades 7 to 9 for students aged 13 to 15 years), which had volunteered to take part in the 3 year project. The schools were located in four municipalities, urban and rural, in different parts of Finland. The total number of students in grades 1 to 9 in these schools was about 1900. Response rates to the first data collection on children's free time activities at the beginning of the study was close to 100% in the

schools for grades 1–6, and about 70% in the schools for grades 7 to 9. The number of parents who gave their consent to the researchers to collect data from teachers was 875. Many parents had more than one child in the experimental schools, and therefore, this number covered a higher number of students. The number of teachers involved was 124. In addition, the principals of the seven schools participated actively in the project. For research purposes, comparison schools, comparable in size and type of municipality, where the ISD programme was not implemented, were included in the project. At the beginning of the project, basic data were collected on how students spent their time in the afternoons and their wishes for extracurricular activities. This assessment was repeated at the end of each academic year. Students' participation in activities offered at school was also recorded for research purposes. With parents' consent, class teachers assessed students' socio-emotional behaviour with the JYLS framework using a 24-item version of the Teacher Form of the Multidimensional Peer Nomination Inventory (MPNI; Pulkkinen et al., 1999). Teacher ratings were repeated at the end of the project. These assessments were also conducted in the comparison schools.

The school principal recruited the staff and supervised the activities organized on the school premises. The M/A groups were supervised by people who, in most experimental schools, were employed part-time as teaching assistants, helping children with special needs. In some schools, full-time staff members known as "school supervisors" were recruited to supervise the M/A groups and to assist the school principal in the organization of M/A and club activities.

Hobby clubs were supervised by teachers on extra pay, if they wanted to take this work on, and if not, supervisors were recruited from the school's collaborative network. This network included sports and arts organizations, church and municipality youth sector, 4-H^{iv}, scouts, and parents' organizations. The ISD project did not affect teachers' work; they continued to teach their lessons as they had done before. The change that occurred was the opening of the doors of the school to other people to supervise the children's activities outside of class hours.

Guiding principles

There were some guiding principles in the implementation of the ISD programme (Pulkkinen & Launonen, 2005). These were discussed with the school principals in monthly meetings. The most important principle was *child-orientation* which means the consideration of children's opinions and wishes, knowledge about the child's developmental needs, and the responsibility of adults for children's education and upbringing. It does not mean child-centredness, which is dominated by children.

In practice, child-orientation meant, for instance, arranging the school day by considering changes in children's activity level and aiming for a good rhythm in alternating teaching, free time and hobbies during the course of the school day. In many schools, lunch break is only 20

minutes, but during the experiment many schools lengthened it into an hour, which they called the "siesta". Children's experiential perspectives on the alternation of activities were considered, in addition to the schools' organizational and the working adults' perspectives.

Furthermore, each student's participation in extracurricular activities was monitored, and those students who were not involved in activities (offered by the school or organized privately by parents) were encouraged to participate by their class teacher. This was a new kind of approach to the arrangement of extracurricular activities, because normally the most active students sign up for the available hobby clubs after seeing notices about them, which affects the mix of participation in the hobby clubs for some students. Sometimes the teacher telephoned the parent and told him/her what was being offered at the school which led to the child joining an M/A group and being happy about not having to be home alone. Sometimes teachers formed a sports team and invited students to play with them. This led to students who had been playing truant gaining a more positive experience of the school and of the teachers. They often then returned to school.

During the ISD project, teachers found that extracurricular activities did not compete with school work and were meaningful for the children. These observations helped teachers to accept the importance of taking care of every child individually and improving the ecology of children's social development through individualized planning.

During the ISD project, teachers found that extracurricular activities did not compete with school work and were meaningful for the children. These observations helped teachers to accept the importance of taking care of every child individually and improving the ecology of children's social development through individualized planning. In particular, at risk children were encouraged to participate in the activities offered by the school. Adults were available to interact with, and a basis for spending free time in a good way was created. This was seen as early preventive work to avoid the development of problem behaviours. Other action principles included diversity, multi-professionality, networking, and shared responsibility. The principle of *diversity* included the freedom for the school to be innovative and unrestricted in fulfilling the idea of the ISD in a way which best suited the school context and parents' wishes and working conditions. Certain rules were, however, fixed and the principle of child-orientation was the main one. In the monthly meetings with the school principals how the ISD programme was being applied was discussed.

The principle of *school-centredness* means that the M/A groups and most hobby clubs are organized at the school, supervised by staff recruited by the school principal and managed by him or her. One of the advantages of the school-centred organization compared to a centralized organization for a whole community or a fragmented organization of individual enterprises is that, at school, activities can be planned in close cooperation with parents and integrated with school work in terms of content and timing. It is important to see

children's cognitive learning and socio-emotional development as a whole.

Pedagogy at school offers a supportive situation for the supervision of children's activities by people who are not trained teachers. It is likely that supervision organized by a school offers students more long-standing human relationships and a higher level of continuity in a given activity than more casually organized activities. The school-centred organization of activities diminishes the need to establish a new organization for out of class activities, which reduces costs, compared to the resources needed for organizing these activities outside of the school.

Furthermore, the indoor and outdoor school environment has been designed and set up for children and a variety of activities. Importantly, schools are empty before and after school hours. It is economic to use the school premises at these times instead of building a separate space. Classrooms can be set up for M/A group activities by using screens and other tricks. When children spend the day in the school environment, they have the opportunity to be with their schoolmates, and they do not need to move from place to place, which increases safety. The free use of school facilities is not, however, simple if this principle has not been thoroughly discussed with the school principals and accepted by the municipal authorities responsible for the use of public spaces.

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The principles of *multi-professionality, networking, and shared responsibility* refer to the aspect of school-centredness. The school can be a centre of activities where teachers work with people from different professions and with different specialisms. Networking with the organizations around the school helps with the recruitment of staff and reduces costs, because often it is a matter of reorganizing the use of available resources rather than receiving extra resources for these activities. For instance, staff or volunteers from the church and municipal youth sectors are often prepared to work in the evenings. Shifting the work (at least partly) to the afternoon frees the evenings for families to spend time together. The principle of shared responsibility for children and their education in cognitive and social skills can be communicated to the school staff and community.

Outcomes of the ISD project

The schools applying the integrated school day were successful in organizing activities. At the beginning of the ISD project, there were hardly any hobby clubs but during the first year of the project, 37 hobby clubs were established. This number increased to 139 in the third year of the project. Activities were classified into seven domains: individual sports (dancing, swimming, gymnastics), team sports (football, ice hockey, floorball), arts and

crafts (visual arts, handicrafts, cooking), music (playing a musical instrument, playing in an orchestra or band, singing in a choir), academic clubs (computers, science, literature), performing arts (drama, circus skills), and youth programmes (4-H, scouts). In middle childhood, boys and girls chose different extracurricular activities. Girls preferred individual sports, arts and crafts, music, and performing arts more than boys who, in turn, preferred team sports and academic clubs more than girls. These findings were in line with those based on adolescent samples in previous studies.

Activities organized at school significantly reduced the amount of unsupervised time spent by children who were in the lower elementary school (grades 1-6). At the beginning of the project, 42% of the parents estimated that their child in the first or second grade needed afternoon group activities, and 18% estimated that he/she needed morning group activities. During the last academic year of the programme, participation rates of children in the M/A groups were 68% in the afternoon and 64% in the morning; much higher than the parents' estimates. The need for supervised M/A activities diminished when the number of class hours increased, but still in the fifth grade four times more children attended the morning groups (about 20%) than the number estimated by the parents (5%). Participation in the hobby clubs during the last year of the 3 year project was high from the first grade to the sixth grade (from 63% to 77%); the rate increased across the years of the study as the hobby clubs increasingly took place at the schools.

Hobby clubs were also available for students in the higher elementary school (grades 7 to 9, ages 13 to 15 years); the participation rate was 50%. They have more class hours than students in the lower elementary school. Regrettably, the organization of school work in the higher elementary school into six weeks periods made it difficult to arrange hobby clubs at regular times. Class schedules might change completely after a 6-week period which tended to make it hard to find a regular time for hobby clubs across successive 6-week periods and different classes. The students highlighted this as an issue.

The participation in activities offered by schools increased students' satisfaction with school as estimated by 89% of teachers

The participation in activities offered by schools increased students' satisfaction with school as estimated by 89% of teachers. None of the teachers had noticed a negative change in students' satisfaction with school. About half of the teachers assessed that, in addition, their own job satisfaction had increased. These findings are important because in the beginning the teachers were quite resistant to the programme. The students' own evaluations and the parents' evaluations showed, correspondingly, an increase in students' satisfaction with school, and the attitudes of parents towards the ISD project became more positive over the course of the project.

Many parents were worried about the end of the project. They wrote long positive comments about the project in the final assessment (Pulkkinen & Launonen, 2005). They were pleased by, for example, the organization of hobby clubs in the afternoon which freed up the evenings for families and reduced the need for children to be transported to their

hobby clubs. They acknowledged that they could concentrate on their work when they knew that their children were safely at school in their M/A groups.

As researchers, we were interested in, firstly, whether participation in the ISD programme had positive effects on children's well-being, assessed in terms of reducing internalizing problem behaviours (social anxiety and depressive symptoms; cf. Fig. 1). The results showed positive outcomes (Metsäpelto, Pulkkinen, & Tolvanen, 2010). Children in the experimental group who participated in the ISD programme for three years, from grade 1 to 3 or from grade 2 to 4, showed lower incidence of internalizing problem behaviours at the end of the project than children in the comparison groups, consisting of children from grades 3 or 4 who had not attended the ISD programme (see Figure 3). Differences were significant for social anxiety and in the same direction for depressive symptoms. The means were calculated using parameters which eliminated the effects of age, gender, and the classroom. We also found that the longer the duration of participation in the ISD programme (1, 2, or 3 years), the lower were the internalizing problems at the end of the ISD programme.

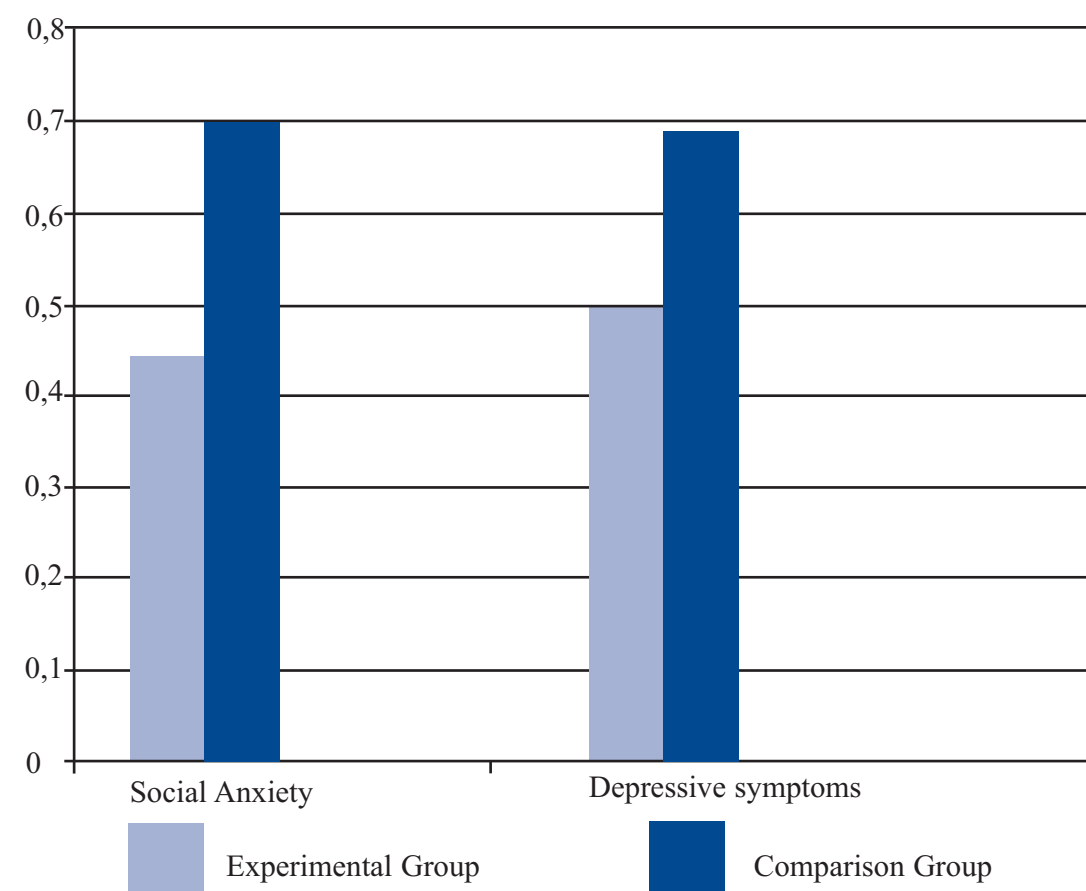


Figure 3. Children in experimental groups who had participated in the ISD programme in grades 1 to 3 or 2 to 4 (experimental group) were lower in internalizing problem behaviours in the final assessment than children who had not attended the programme (comparison group)

The results suggested that reduced loneliness, participation in activities with school mates, and having adult supervision improved children's well-being when, particularly, social anxiety was used as a criterion.

The results suggested that reduced loneliness, participation in activities with school mates, and having adult supervision improved children's well-being when, particularly, social anxiety was used as a criterion. Our findings were in line with earlier findings which have shown that participation in extracurricular activities in middle childhood is negatively correlated with internalizing problem behaviours. Our findings also confirmed the earlier notion that the long-term and consistent engagement in activities is required in order to bring about marked benefits for the participants.

Second, we were interested in whether the type of extracurricular activities in which the students participated was associated with their socio-emotional behaviour and academic skills. We compared students who had participated in activities for 0, 1, or 2-3 years in the grades from 3 to 5 or from grades 4 to 6 (Metsäpelto & Pulkkinen, 2011a). The most positive outcomes were obtained from the participation in arts and crafts clubs and music clubs. Statistical tests showed that academic *working skills* defined by persistence, concentration, and carefulness were significantly better in students who participated in these clubs for 2 to 3 years compared to those who did not attend them (Figure 4). Likewise, *academic attainments* defined by reading, writing, and arithmetic were significantly better in the students who attended these clubs than in those who did not.

The most positive outcomes were obtained from the participation in arts and crafts clubs and music clubs. Statistical tests showed that academic working skills defined by persistence, concentration, and carefulness were significantly better in students who participated in these clubs for 2 to 3 years compared to those who did not attend them

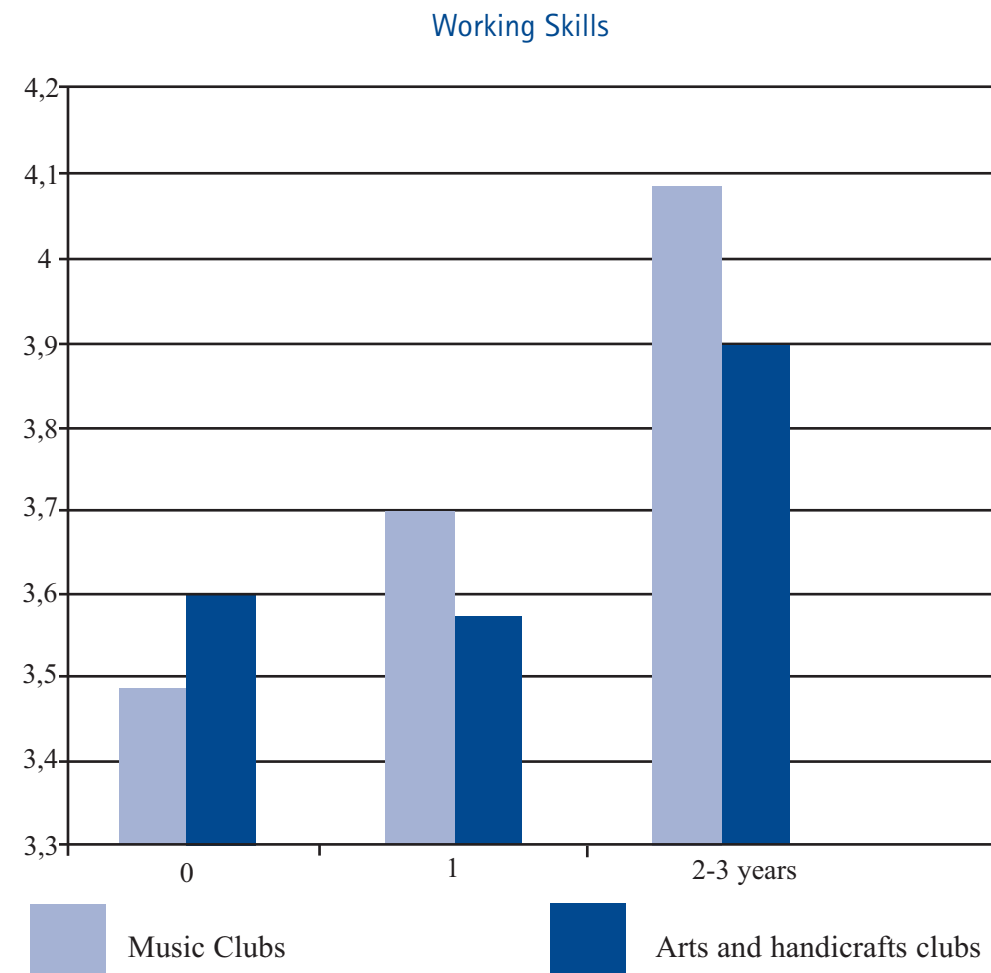


Figure 4. Students who participated in music clubs and arts and handcrafts clubs in the grades 3 to 5 or 4 to 6 for 2 to 3 years scored better in academic working skills than those who did not participate in them

Social skills assessed in terms of constructive and compliant behaviour indicating high self-control (cf. Fig. 1) were significantly better in the students who had attended arts and crafts clubs or music clubs for at least one year than in students who had not attended them (Figure 5). Participation in arts and crafts clubs for 2 – 3 years was also significantly associated with lower internalizing problem behaviours.

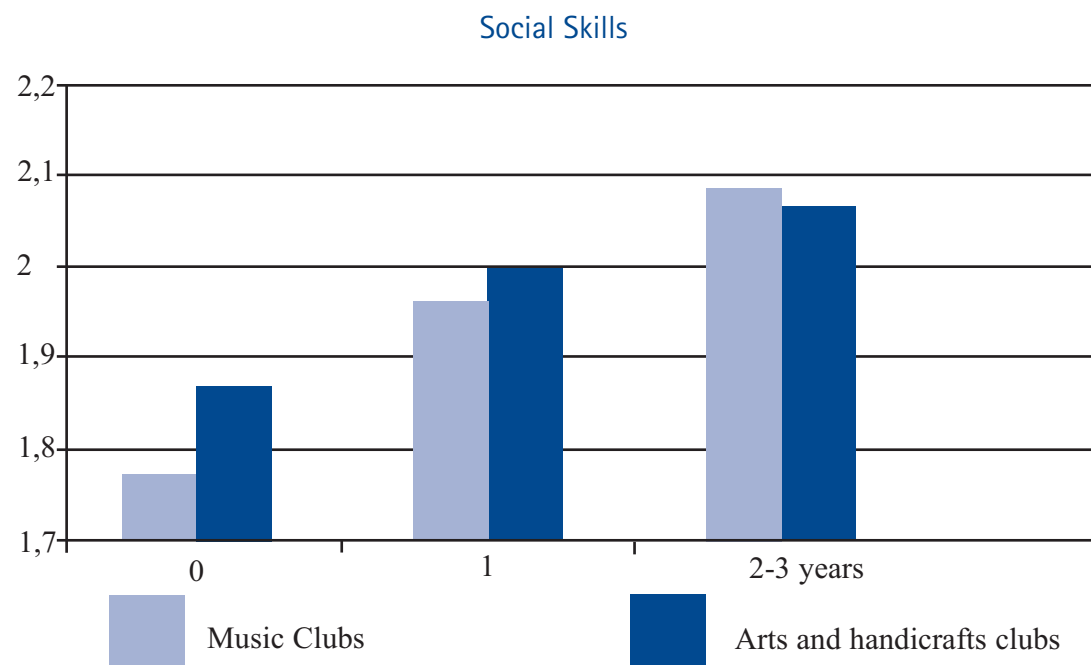


Figure 5. Students who participated in music clubs and arts and handicrafts clubs in the grades 3 to 5 or 4 to 6 for at least 1 year had significantly higher social skills than students who did not participate in them

Participation in sports was not associated with positive outcomes in school success or social skills. Rather, participation in individual sports was associated with higher internalizing problem behaviours perhaps due to the solitary competition these involved. Sports activities are, however, important for children's physical fitness. Participation in academic clubs was associated with higher academic attainment and lower internalizing problem behaviours, and participation in performing arts with better academic working skills. We failed to find an association between participation in youth programmes and positive outcomes. Rather, the children who participated in youth programmes for one year were higher in externalizing problems and lower in academic attainment, compared to non-participants. These effects were levelled off when the participation lasted longer. It seems possible that the adult supervision may not be intensive enough to promote well-being in children at least with regards to short-term participation.

Participation in hobby clubs did not reduce externalizing problem behaviours such as aggression and hyperactivity-impulsivity in a significant way. There were, however, trends that a longer duration of participation in arts and crafts or music clubs might be associated with lower externalizing problem behaviours. It is also possible that in order to reduce externalizing problem behaviours, more specific intervention efforts to modify behaviour (such as in Pulkkinen et al., 1977) should be added to the ISD programme.

FINAL WORDS

Our experiment demonstrates that social anxiety can be reduced by increasing adult supervised peer-group activities, and that both academic working skills and social skills can be promoted in children by adding voluntary arts and crafts and music activities to the school day.

The applied ISD project was a demanding effort for a researcher who had been focused on basic research outside the school organization. There are many practical problems to overcome and many different people to negotiate with in the ecology of a school system. They have an effect, particularly, on conducting systematic research. We were very pleased that we coped well with these difficulties and took a stringent approach to testing the effectiveness of the ISD programme on children's psychological well-being, socio-emotional behaviour, and school achievement. Our experiment demonstrates that social anxiety can be reduced by increasing adult supervised peer-group activities, and that both academic working skills and social skills can be promoted in children by adding voluntary arts and crafts and music activities to the school day. The results showed that participation in these clubs advanced communication and collaboration, i.e., *non-routine interactive skills*.

The positive outcomes of the arts and crafts clubs and music clubs particularly in terms of academic working skills and school attainment are in accordance with modern brain research which shows that music and handicrafts extensively affect the development and functioning of the brain in a positive manner. At present in the western world, where many children have little experience in working with their hands, training skills in which hands are used would complement their learning and development in an important way. Cognitive training develops the brain only in limited areas.

The process described in this article affected Finnish school legislation. Beginning in the autumn of 2004, the law^{vi} mandated that supervision of children's activities in the morning and afternoon should be available throughout the country for all first- and second-grade children and for special needs children at any grade and should be financially supported by the government. The morning and afternoon activities in the new law are intended to achieve several goals: (1) support the raising and educating of children at home and at school, (2) advance children's emotional development and ethical growth, (3) promote well-being and equality, (4) prevent marginalization, and (5) offer children opportunities to participate in well-supervised activities and rest in a tranquil environment. Furthermore, parents of the first- and second-graders were granted the opportunity to shorten their working days with the support of social security.

Unfortunately, the situation with regards to the arrangement of morning and afternoon activities varies largely between municipalities. Children do not have an unconditional legal right to morning and afternoon activities as they have to daycare services, and therefore,

municipalities are not forced to arrange these services. For instance, Helsinki and a town near it, Espoo, offer morning and afternoon activities only for first-graders, although there is an urgent need for these services among second-graders and also among third-graders (who are not yet covered by the law). A recent report shows that the number of participating first-year students was 48.0% of the age cohort and that of second-year students 27.3% (Iivonen, 2009). During the ISD project these percentages were 77% and 59%, correspondingly.

The quality of M/A activities also varies in regard to space, teacher/student ratio, content of activities etc. The M/A activities are not organized in a school-centred way as they were within the ISD programme, because the law allows for many arrangements. There is much to do in terms of monitoring the quality of activities offered to children, or the lack of these activities. If the supervision of afternoon activities is inadequate, the groups may be too large, noisy, violent, and may not include activities that interest children as Belle, 1999 has found in the United States.

The Minister of Education who closely followed the establishment of the ISD programme in the experimental schools became convinced about its positive effects on the ecology of school and on children's development. The costs of the ISD were reasonable in relation to its benefits (they were calculated for different models as explained in Pulkkinen & Launonen, 2005). In a Ministry of Education report (2005) concerning well-being at school, the integrated school day was ranked as the first among the reforms needed for improving well-being at school. Governments, however, change and new ministers have their own opinions and goals; the new ministers have increased, for instance, funds for hobby clubs which is positive. About 85% of municipalities provide club activities, mainly run by teachers. The integrated school day was not, however, established for the organization of the activities, but there is a sustainable interest in this idea among people. It shows that seeds were sown on fertile ground. Perhaps the day will come when these seeds will bloom for the betterment of Finnish school and the improvement of the quality of childhood.

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ⁱ Early childhood education in Finland consists of care, education and teaching linked together. The aim is to ensure the prerequisites for healthy growth, development of children and learning. There is an unconditional right to day care for all children. This means that children about 10 to 11 months to six years old are welcome to municipal day care organized by their local municipality.

Children's day care provides the child with an environment in which to grow that encourages the child to explore, to learn, and express him/herself. It consists of systematic and target-oriented interaction and cooperation by putting the main emphasis on children's natural inclination to play. The partnership in prevailing early childhood education means that children's parents and childcare staff consciously commit to supporting together the child's growth, development and learning.

Parents can choose between municipal day care in a day-care centre, municipal day care in a family, to take care of their children themselves and receive a home-care allowance (if the youngest child is less than 3 years old); or a private-care allowance. One year before their compulsory education starts, children have access to pre-school teaching arranged either in a day care centre or at a school. Pre-school teaching refers to the systematic education and teaching. In a day-care centre, part of the day is used for pre-school.

ⁱⁱ More information about the JYLS can be found in: <https://www.jyu.fi/ytk/laitokset/psykologia/en/research/jyls>

ⁱⁱⁱ More information about the MUKAVA project can be found in: <http://www.mukavahanke.com/english/index.html>

Information about the sub-project on introducing students to working life can be found in: <http://www.peda.net/veraja/tori/english>

^{iv} 4-H is a youth organization which was established in the United States at the beginning of the twentieth century. The name represents four personal development areas of focus for the organization: head, heart, hands, and health. The goal of 4-H is to develop citizenship, leadership, responsibility and the life skills of youth through experiential learning programmes and a positive youth development approach. Though typically thought of as

an agriculturally focused organization as a result of its history, 4-H today focuses on citizenship, healthy living, science, engineering, and technology programmes.

Today, 4-H and related programmes exist in over eighty countries around the world; the organization and administration varies from country to country. Each of these programmes operates independently, but cooperatively through international exchanges, global education programmes, and communications.

^v Floorball is a type of floor hockey.

^{vi} Basic Education Act 1998/628, amendment §48, 19.12.2003/1136

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(home page: <http://users.jyu.fi/~leapulkk>)

Author's Note

This paper was prepared as a part of the projects (Nos. 44858, 209035, and 127125) funded by the Academy of Finland. The Finnish Innovation Fund (SITRA) funded the project on the Integrated School Day from 2002–2005.