

Riitta-Leena Metsäpelto & Lea Pulkkinen

## **The benefits of extracurricular activities for socioemotional behavior and school achievement in middle childhood: An overview of the research<sup>1</sup>**

### **Abstract**

*The current article provides an overview of studies examining the developmental significance of extracurricular activities in middle childhood. We describe the main theoretical frameworks (ecological systems theory and positive youth development approach) that have guided the research on the role of extracurricular activities in the development of children. Then, we explore why children choose certain extracurricular activities and examine whether participation in these activities is related to variation in children's adjustment. We highlight findings produced within the European context. In particular, we describe the Integrated School Day program implemented by researchers from the University of Jyväskylä (Finland), and summarize how extracurricular activities organized as part of the program benefitted the socioemotional development and school achievement of the children involved. On the whole, evidence presented in this paper underscores the significance of extracurricular activity participation as one of the influential developmental contexts in which children and youth spend their time.*

### **Keywords**

*Extracurricular Activities; Participation; Socioemotional behavior; School achievement; Middle childhood; Integrated school day*

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Dr. Riitta-Leena Metsäpelto (corresponding author), Department of Teacher Education, University of Jyväskylä, P.O. Box 35, 40014, Finland  
e-mail: riitta-leena.metsapelto@jyu.fi

Prof. Dr. Lea Pulkkinen, Department of Psychology, University of Jyväskylä, P.O. Box 35, 40014, Finland  
e-mail: lea.pulkkinen@psyka.jyu.fi

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## **Die positiven Auswirkungen von außerschulischen Aktivitäten auf das sozioemotionale Verhalten und schulische Leistungen in der mittleren Kindheit: Ein Überblick über die aktuelle Forschungslage**

### **Zusammenfassung**

*Der vorliegende Beitrag bietet eine Übersicht über die aktuelle Forschungslage zur Signifikanz außerschulischer Aktivitäten für die Entwicklung in der mittleren Kindheit. Es werden die theoretischen Rahmen (ökologische Systemtheorie und „positive youth development approach“) beschrieben, welche die Forschung zur Rolle außerschulischer Aktivitäten in der kindlichen Entwicklung leiten. Anschließend wird untersucht, warum Kinder bestimmte außerschulische Aktivitäten auswählen und ob die Teilnahme an solchen Aktivitäten mit Unterschieden in der kindlichen Anpassung verbunden ist. Ergebnisse aus dem europäischen Kontext werden dabei hervorgehoben. Insbesondere das von Forschern der Universität von Jyväskylä in Finnland durchgeführte Integrated School-Day-Programm wird beschrieben und es wird zusammengefasst, welche positiven Einflüsse die außerschulischen Aktivitäten im Rahmen dieses Programmes auf die sozioemotionale Entwicklung und die schulischen Leistungen der teilnehmenden Kindern bewirkten. Zusammenfassend kann festgehalten werden, dass die in diesem Beitrag präsentierten Ergebnisse die Bedeutsamkeit der Teilnahme an außerschulischen Aktivitäten als einen der einflussreichen entwicklungsrelevanten Kontexte unterstreichen, in denen Kinder und Jugendliche ihre Zeit verbringen.*

### **Schlagworte**

*Außerschulische Aktivitäten; Teilnahme; Sozioemotionales Verhalten; Schulische Leistungen; Mittlere Kindheit; Ganztag*

Extracurricular activities refer to adult-supervised activities that are unrelated to the primary curricula, provide opportunities for participants to develop specific skills or knowledge, and take place outside of school hours. These activities are organized by schools, youth organizations, and after-school programs. Consequently, the range of activities included is substantial, varying from specific types of activities (e.g., sports, music, arts) to general programs offered by youth developmental organizations (e.g., 4-H and scouts). Activity involvement is a common developmental experience for many children and youths in Western nations (Larson & Verma, 1999).

The evidence on the developmental significance of extracurricular activities has long been accumulating, but the research is limited in many ways. The evidence is based mostly on studies conducted in the United States (U.S.), which limits the generalizability of findings to other, for instance European, cultures. Furthermore,

the studies on adolescence are well represented while findings based on middle childhood samples are largely ignored. Yet, middle childhood, ranging from age seven to 12, is an age phase clearly distinct from earlier childhood years and adolescence. The key developmental tasks defining middle childhood include the establishment of peer relations, acquirement of socially appropriate conduct, and forming the basis for academic achievement (Masten & Coatsworth, 1998). These skills can be developed in extracurricular activities, which typically offer experiences of teamwork and support the development of many social, cognitive, and physical skills.

While reviews of the role of extracurricular activities in adolescence are available (Eccles, Barber, Stone, & Hunt, 2003; Farb & Matjasko, 2012), such overviews concerning younger children are rare. The current article aims to fill this gap by focusing on the importance of extracurricular activities in middle childhood. Specifically, the goal is to investigate what is currently known about the benefits of extracurricular activities for children's socioemotional behavior and school achievement in this age group. We start by describing the main theoretical frameworks that have guided the research on the role of extracurricular activities in the development of children. Then, we address two sets of questions, which represent central lines of research within this age group: we explore why children choose certain extracurricular activities and whether participation in these activities is related to variation in children's adjustment.

To this end, we conducted a review of scientific literature in the beginning of 2014 to identify relevant studies (see Table 1). The review began with a formal search for peer-reviewed journal articles that had been indexed in the major databases in the fields of psychology, education, and educational psychology (Academic Search Elite, ERIC, Proquest, PsychArticles, PsychInfo, and Science Direct) between 1990 and 2014 using the keywords "extracurricular", "elementary school", and "primary school". We also perused reference lists of the key articles to identify additional relevant publications. Studies with adolescents were not included in the overview (see Table 1), but some of them are used when discussing the topic. In these instances, the age group is explicitly mentioned. We excluded studies that concerned groups of children with special needs (e.g., disabilities), or investigated outcomes other than socioemotional behavior or academic achievement, such as obesity or physical activity. Both quantitative and qualitative studies were considered applicable, and articles including multiple extracurricular activity domains were preferred over studies focusing on a single activity. A few time-use studies were also incorporated into the overview in an effort to include studies that have used distinct methods to capture extracurricular activity involvement. It should be noted that the current overview is not intended to be exhaustive. Rather, it aims to draw together the key findings and lines of research on extracurricular activities in middle childhood.

Table 1: Empirical studies investigating the choices and benefits of extracurricular activity participation in middle childhood

Study	Country; ethnic group (%)	Sample size	Age group	Research focus	Type of EC	Measure of EC	Key findings
<i>Choices of EC</i>							
Anderson, Funk, Elliott, & Smith, 2003	United States	238	9–11	Associations between parental support and pressure on children's EC; affective experience of EC (enjoyment, anxiety)	School team sports, sports outside of school, clubs or groups, music, dance, volunteering, and other	Children reported on a questionnaire about activities they had participated in during the last year	<ul style="list-style-type: none"><li>• Parental support was related to children's higher total amount of EC.</li><li>• Parental support was positively associated with enjoyment and negatively associated with anxiety in activities.</li><li>• Parental pressure was a negative predictor of enjoyment.</li></ul>
Dearing et al., 2009	United States; European-American (46), African-American (41), Latino (9)	1,420	Kindergarten–Grade 6	Associations between family income and children's participation in out-of-school activities; role of the quality of neighborhood and home environment in the association	Athletics, before- and after-school programs, community center activities, lessons, church clubs or activities other than religious services, summer camps	Parents reported on a questionnaire whether the child had participated in activities during the past year (yes/no)	<ul style="list-style-type: none"><li>• Low-SES children were less likely to participate in EC than children from middle-income or wealthier families.</li><li>• Affluence in the neighborhood and cognitive stimulation in the home mediated the association between income and participation.</li></ul>
Dunn, Kinney, & Hoffert, 2003	United States	23	8–12	Type, variety, and intensity of EC; parents' activities; parental goals and desired attributes for children, and how they can be learned	Sports, dance, gymnastics, rhythm, music, art, drama, safety, school clubs, youth groups, scouts, religious education	Interviews with parents and children	<ul style="list-style-type: none"><li>• Sport was the most common activity.</li><li>• Girls were involved in a greater variety of EC than boys.</li><li>• Parents saw EC as providing their children with opportunities to develop desired attributes (e.g., discipline, responsibility, social skills) and to have fun and be physically active.</li></ul>
Epps, Huston, & Bobbitt, 2013	United States; African-American (55), Hispanic (29), white (13), Native American (3)	824	6–13, followed 3 and 6 years later	Impact of antipoverty intervention on children's EC; developmental patterns of EC across time	Sports lessons, religious activities, clubs, community centers, service	Parents and children reported on a questionnaire about the breadth and intensity of EC at each data collection wave	<ul style="list-style-type: none"><li>• Antipoverty intervention increased children's participation in structured activities.</li><li>• Program effects did not vary across age, time of measurement, or gender.</li><li>• EC increased until early adolescence and declined thereafter.</li></ul>

(continued)

Table 1: Empirical studies investigating the choices and benefits of extracurricular activity participation in middle childhood (continued)

Study	Country; ethnic group (%)	Sample size	Age group	Research focus	Type of EC	Measure of EC	Key findings
Jacobs, Vernon, & Eccles, 2005	United States	~500	Grades 1, 2, and 4, followed at Grades 3, 4, and 6, and at Grades 7, 8, and 10	Gender differences in EC by types, number, and breadth of activities; associations between EC, perceived competence, and task values; parental support for EC	Team sports, individual sports, academic activities, music/drama, hobbies, group activities	Mothers listed on a questionnaire the activities in which their child was involved, how much time and how frequently the child participated	<ul style="list-style-type: none"> <li>Girls and boys participated in different activities and girls were involved with a wider variety of activities.</li> <li>Activity participation was associated with later self-perceptions of competence and values.</li> <li>Early values and self-perceptions did not generally predict later participation in activities.</li> <li>Children were more likely to participate in and feel competent about activities that their mothers valued.</li> </ul>
Simpkins, Vest, & Becnel, 2010	United States; European-American (92)	594	Grades 1, 2, and 4, followed 1, 2, 3, 7, and 8 years later	Association between patterns of sport and music participation during elementary school and adolescents' activity participation; role of adolescents' motivational beliefs (self-concept of ability, interest) in such association	Sports, music	Children reported how often they played on sport teams or a musical instrument (from "never" to "every day") (Wave 2)  Children reported how often they played on sport teams or practiced their musical instrument (from "never" to "almost every day or a lot of time") (Waves 3 and 4)  Youth reported the number of hours spent each week taking part in organized sports or practicing a musical instrument (from "none" to "21 or more hours") (Wave 6)	<ul style="list-style-type: none"> <li>Children who participated consistently across multiple years, and children who were highly active had higher adolescent motivational beliefs four years later than their peers.</li> <li>Motivational beliefs in elementary school positively predicted adolescents' participation one year later.</li> <li>Children typically maintained their orientation toward sports and music as they aged.</li> </ul>

(continued)

Table 1: Empirical studies investigating the choices and benefits of extracurricular activity participation in middle childhood (continued)

Study	Country; ethnic group (%)	Sample size	Age group	Research focus	Type of EC	Measure of EC	Key findings
<i>Benefits of EC</i>							
Covay & Carbonaro, 2010	United States; mainly white, minorities of blacks, Hispanics, Asian, and children of other races	10,140	Grade 3 (Grade 1 data was used to control for prior achievement)	SES differences in EC; SES and EC effects on academic achievement (reading, math) via non-cognitive skills	Sports, clubs, music, dance, art, performing arts	Parents reported on a questionnaire the child's participation in EC in the past school year (yes/no)	<ul style="list-style-type: none"><li>• High-SES students had higher EC compared to students from lower SES.</li><li>• EC was related to higher noncognitive skills.</li><li>• EC explained only a small amount of the SES advantage in academic achievement and noncognitive skills.</li><li>• The relationship between EC and high academic achievement was mediated by increases in noncognitive skills.</li></ul>
Dumais, 2006	United States; mainly white, blacks and Hispanics	5,696	Kindergarten, followed in Grades 1 and 3	EC during the early school years and differences by gender, race, and SES; associations between EC and educational outcomes (reading, math); interaction between SES and EC, and different types of activities in predicting educational outcomes	Dance, athletic activities, clubs, music, art lessons, performing arts programs	Parents reported on a questionnaire whether the child had ever participated in the activities listed (yes/no)	<ul style="list-style-type: none"><li>• The majority of children participated in EC with the highest participation rates for white children from high-SES backgrounds.</li><li>• The number of activities was related to higher reading test scores and teacher rated math skills.</li><li>• The benefits of participation were greater for students from low-SES backgrounds.</li><li>• The most beneficial activities were dance lessons, music lessons, and athletics.</li></ul>
Fletcher, Nickerson, & Wright, 2003	United States; European-American (65), African-American (35)	147	Grade 4	Association between EC and adjustment (academic competence, psychosocial development, externalizing and internalizing behavior)	Sports, church activities, other clubs (e.g., scouts)	Parents reported on a questionnaire up to three extracurricular activities in which the child had participated	<ul style="list-style-type: none"><li>• Participation in club activities was related to higher grades and teacher rated academic competence.</li><li>• Participation in sports was related to higher social competence and psychosocial maturity.</li><li>• EC was not related to externalizing or internalizing problems.</li></ul>

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Table 1: Empirical studies investigating the choices and benefits of extracurricular activity participation in middle childhood (continued)

Study	Country; ethnic group (%)	Sample size	Age group	Research focus	Type of EC	Measure of EC	Key findings
McHale, Crouter, & Tucker, 2001	United States; white	198	10, followed at age 12	Associations between free-time activities and child adjustment (grades, depression, conduct problems); mediating role of social context of activities in such associations; direction of effect between activities and adjustment	Sports, hobbies (e.g., art, music, dance, handicrafts)	Parents and children reported on a telephone interview on the time used in various daily activities outside of school and work hours	<ul style="list-style-type: none"> <li>• Participation in hobbies was concurrently related to lower depression; and participation in sports predicted lower depression two years later.</li> <li>• Participation in unstructured activities (e.g., outdoor play, hanging out) predicted maladjustment.</li> <li>• Social contexts of free-time activities (e.g., time with mother) explained activity-adjustment links to some extent (e.g., links between hobbies and depression).</li> <li>• Better adjusted children became more involved in adaptive activities over time.</li> </ul>
Molinuevo, Bonillo, Pardo, Doval, & Torrubá, 2010	Spain; European	867	Grades 2, 4, and 6	Associations between EC and internalizing and externalizing problems and social behavior	Sports and non-sports (dance languages, music, computers, psychomotor activity, church, workshops, and organized leisure centers)	Parents reported on a questionnaire whether the child had practiced any of the activities at least once a week at the moment of the study (yes/no)	<ul style="list-style-type: none"> <li>• EC was related to lower internalizing and externalizing problems and higher social competence.</li> <li>• Associations differed by gender, type of activity, and informant (teacher or parent).</li> <li>• Participation in sports in boys and in nonsports in girls was related to better adjustment.</li> </ul>

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Table 1: Empirical studies investigating the choices and benefits of extracurricular activity participation in middle childhood (continued)

Study	Country; ethnic group (%)	Sample size	Age group	Research focus	Type of EC	Measure of EC	Key findings
National Institute of Child Health and Human Development Early Child Care Research Network (NICHD), 2004	United States; European-American (79), African-American (11), Hispanic (6), other (4)	933	Kindergarten, Grade 1 (data at 54 mo was used to measure prior functioning)	Associations between family factors and out-of-school care; predictive role of prior functioning in the type of out-of-school care; associations between out-of-school care and academic achievement, social competence, and behavior problems	Extracurricular activities such as coached sports or music lessons	Mothers reported on an interview whether the child has, during the past week, participated in extracurricular activities (yes/no)	<ul style="list-style-type: none"><li>• Out-of-school care was associated with family factors; e.g., EC was related to higher family income and mother's education level.</li><li>• Better language skills at 54 mo predicted consistent EC in kindergarten and Grade 1.</li><li>• Children with consistent EC in kindergarten and first grade obtained higher standardized math test scores than children who did not consistently participate in these activities.</li></ul>
Posner & Vandell, 1999	United States; white (52), African-American (48)	194	Grade 3, followed in Grade 5	Child, family, and contextual factors in relation to after-school activity participation in low income children; association between activity participation and the adjustment, and the direction of effect	Coached sports, nonsport activities (music, dance, group activities, such as scouts)	Children reported on a telephone interview of the time used in various after-school activities	<ul style="list-style-type: none"><li>• Race, gender, family structure, grade and age, and availability of after-school programs were related to the ways the children spent their after-school hours.</li><li>• Third-graders who had better grades, work habits, and emotional adjustment were likely to be involved in EC in the fifth grade.</li><li>• African-American children who participated more in nonsport activities over three years were more emotionally adjusted in Grade 5.</li><li>• Children who spent more time in coached sports received lower grades than children who spent less time in sports.</li></ul>
Schumacher, Dimech, & Seiler, 2011	Switzerland; Swiss (87)	207	7–8, followed 1 year later	Association between participation in extracurricular sports activities and social anxiety symptoms	Sports	Parents reported on a questionnaire whether their child had participated in an organized sport activity, the number of hours per week, and the type of sport	<ul style="list-style-type: none"><li>• Social anxiety was reduced in children practicing a team sport.</li></ul>

Note. EC = extracurricular activity participation; SES = family socioeconomic status.



When reporting the findings of our literature review, we highlight findings produced within the European context. Particularly, we describe the Integrated School Day (ISD) program, implemented by researchers from the University of Jyväskylä (Finland), and summarize how extracurricular activities organized as part of the program benefitted the socioemotional development and school achievement of the children involved.

## **1. Theoretical frameworks guiding extracurricular activity research**

### **1.1 Ecological systems theory**

Research on extracurricular activities has long relied on Bronfenbrenner's *ecological systems theory* (Bronfenbrenner & Morris, 2006), which recognizes the embeddedness of different ecological systems in producing development. These include the microsystems (directly experienced by the individuals), the mesosystem (linking two or more microsystems such as family and school), the exosystem (environments, social networks, and services having an indirect influence on children), the macrosystem (societal and cultural norms and values, economic and working conditions), and finally, the chronosystem (the dimension of time). Extracurricular activities can be conceptualized as one important developmental context, or microsystem, of children's lives. Children are affected not only by the characteristics of their home environment and school, but also by experiences in their leisure activities, and the transactions across contexts (e.g., Fletcher, Nickerson, & Wright, 2003; Posner & Vandell, 1999).

The network of systems is active and dynamic, and the changes in the systems are crucial to the development of an individual. For instance, changes in the macrosystem may affect children's immediate experiences, microsystems. A study by Posner and Vandell (1999) provides an example, showing how a school district's provision of after-school programs in low-income neighborhoods had a powerful influence on children's time-use. Instead of watching television and playing outside in unstructured activities, many children spent time participating in extracurricular activities such as theater, dance, and academic clubs. The investment on the part of the school district provided low-income children with enrichment and the opportunity to participate in activities that would otherwise be out of reach for many of these children. These findings exemplify how children are influenced by opportunities and restrictions provided by diverse ecologies.

### **1.2 Positive youth development approach**

Another prevalent theoretical framework guiding extracurricular activity studies is the *positive youth development approach* that specifies the broad goal of extracur-

ricular activities as promoting positive development for children (e.g., Metsäpelto & Pulkkinen, 2012; Molinuevo, Bonillo, Pardo, Doval, & Torrubia, 2010). The positive youth development approach is a relatively recent field of research directed toward understanding how wellbeing and developmental success can be nurtured in the next generation (Benson, Scales, Hamilton, & Sesma, 2006). It is focused on improving the lives of all children and youths (in contrast to at-risk groups), the aim being to increase understanding of how contextual factors contribute to the development and what the role of an individual child is in shaping and directing their own development. Evidence has shown that positive youth development and growth is linked to the opportunities provided by schools, communities, and other developmental settings, (1) to learn physical, intellectual, psychological, emotional, and social skills (2) in the presence of warm and nurturing relationships that (3) enable social integration and belongingness, and (4) offer adult guidance and limit setting along with physical and psychological safety. Extracurricular activities, when of high quality, have been shown to include many of these growth promoting features (Mahoney, Larson, Eccles, & Lord, 2005).

### 1.3 Integrated School Day and organized activities in Finland

Extracurricular activities are embedded in other developmental contexts, for instance, in the affordances provided by schools, communities, and cultural settings (Posner & Vandell, 1999). Some cultures have a long tradition of extracurricular activity involvement (e.g., the U.S.), and its positive developmental significance is widely recognized (Mahoney, Harris, & Eccles, 2006). However, educational systems in some other countries, for instance Finland, have only recently started to create opportunity structures for students' extracurricular activity involvement and acknowledged that such contexts can provide unique opportunities for favorable development (see Pulkkinen, 2004). The macrolevel shifts in societal norms and practices, which foregrounded organized activities in the social ecology of children and resulted in educational reform in Finland, will be further elaborated next.

In Finland, there is a long history of dual-earning couples, and the working times of men and women are relatively similar. Working hours are concentrated between 35–40 (or more) hours per week and part-time work is only marginal, also among working mothers (OECD, 2011). The amount of time young children spend at school is typically considerably shorter than the time parents spend at work. The minimum amount of lessons per week for first and second graders is 19 hours, and for fifth and sixth graders, 24 (see [www.oph.fi/english/education/basic\\_education/curriculum](http://www.oph.fi/english/education/basic_education/curriculum)).

In the past (the 1980s), many schools offered students the opportunity to take part in hobby clubs run by teachers after school hours and in municipal afternoon care services within a daycare system for first graders. However, in the early 1990s, the severe economic depression in Finland reduced these arrangements. Children's unsupervised after-school hours were brought to public attention by one

of the authors of the present paper in 1996 (see Pulkkinen, 2004, pp. 134–135.). Subsequently, the Finnish National Board of Education analyzed the status of extracurricular activities in 1998, and found that activities that were once available had been reduced by more than half. International comparisons showed that public services were available for 64 % of children under ten years old in Sweden and 62 % in Denmark, but only for 10 % in Finland (Youthful Finland, 1998). Finland was admonished within the OECD Country Note (OECD, 2001) for the length of unsupervised time for school children. Public discussion and scientific publications (Pulkkinen, 2002) served as catalysts of change in the ways of thinking about the school day and its relationship with child and family wellbeing.

As a result of strong appeals, in 1999 the Finnish Government included the extension and development of organized activities for school children in its four-year program. In 2001, the Ministry of Education established a committee to propose to the government a means to organize activities for children before and after school. Alongside these governmental actions, the ISD program directed by Pulkkinen was launched for 2002–2005 with funding from the Finnish Innovation Fund. The goal was to implement various strategies to subsume organized activities as part of the school day and to decrease the amount of time students are without adult supervision in the mornings and afternoons.

The main innovation of the ISD program was the restructuring of the school day by adding in organized activities before and after school hours along with extracurricular activities. Activities were organized on school premises according to children's wishes, and they were freely available to every child. The extracurricular activities consisted of two types of activities: (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, sometimes also between school hours (called Morning/Afternoon or M/A groups), which also provided young school children with care, and (2) a variety of optional extracurricular activities (e.g., team sports, cooking, and music) for children to attend a few times per week to enrich the recreation in the M/A groups. These two types of activities differed to the extent that they included skill-building and structure; yet both were adult supervised. Participation in the activities offered outside of the curriculum was voluntary.

The ISD program was implemented in four lower and three higher elementary schools, all of which had volunteered to participate. They were located in four municipalities, urban and rural, in different parts of Finland. The total population in lower and higher elementary schools was about 2,000 students from grades one to nine. About 160 teachers were involved, as well as the principals of the seven schools. The schools were provided with financial resources from the Finnish Innovation Fund, which enabled them to organize the extracurricular activities. All children enjoyed an equal opportunity to participate, regardless of their parents' income level.

The ISD program was an intervention study with the general objective of evaluating its effectiveness in producing wellbeing and achievement. The analysis of

lower elementary schools showed that the number of extracurricular activities organized was substantial (Metsäpelto, Pulkkinen, & Tolvanen, 2010). In the first year of the ISD program, the number of hobby clubs was 37, and it increased to 139 in the third year of the program. During the last academic year of the program, 2004–2005, participation rates in the M/A groups were for first-graders 56 % in the morning and 77 % in the afternoon, for second graders, 71 % and 59 %, third graders, 33 % and 35 %, and fourth graders, 19 % and 12 %, respectively (Pulkkinen & Launonen, 2005). Thus, the need for supervised M/A groups reduced when children became older and the number of lessons increased. On the other hand, participation rates in the extracurricular activities were 66 %, 63 %, 77 %, and 69 %, from first grade to fourth grade, respectively. These activities were also available for older students. In grades five to seven, the participation rate was 65 %, and in grades seven to nine, 50 %. In the following sections of this paper, the ISD findings that corroborate the positive association between activity participation and adjustment will be summarized in connection with other extracurricular activity studies.

During the recent decade, the provision of organized activities for Finnish school children has been revived in two complementary ways. Since 2004, M/A groups have been provided for first- and second-grade school children and for children admitted to special needs education in all grades under the provisions of the Basic Education Act ([www.oph.fi/english/education/basic\\_education](http://www.oph.fi/english/education/basic_education)). Local authorities are not obliged to organize these activities, but according to the Finnish National Board of Education, almost all municipalities (98 %) do so ([www.oph.fi/koulutuksen\\_jarjestaminen/ohjeet\\_ja\\_suosituksset/aamu-\\_ja\\_iltapaivatoiminnan\\_jarjestaminen](http://www.oph.fi/koulutuksen_jarjestaminen/ohjeet_ja_suosituksset/aamu-_ja_iltapaivatoiminnan_jarjestaminen)). The law gives municipalities considerable freedom in organizing morning and afternoon activities. For instance, the organizer of the activities is not specified; local authorities may provide services themselves or hire them from the municipal authorities, organizations working with children and young people, associations, and parishes.

The possibility for young children to spend after-school hours under supervision has become an integral part of the school day in most Finnish schools and is indispensable to many families. A recent report shows that the proportion of participating first-year students was 48.0 % of the age cohort and that of second-year students was 27.3 % (Iivonen, 2009). As part of the morning and afternoon activities, students may rest, do homework, attend various indoor and outdoor activities, or participate in extracurricular activities. The revival of organized activities in the Finnish school system has also included an increasing number of extracurricular or club activities. The activities are organized in accordance with the objectives of basic education, as specified in the National Core Curricula (2004). About 85 % of municipalities provide club activities, which are mainly directed by teachers. The most popular activities are sports, music, and handicraft clubs.

The revival of extracurricular activities in the Finnish school context has been an example of the rapid change in legislation in response to children's developmental needs and the needs of the family-home-work triangle. According to ecological systems theory (Bronfenbrenner & Morris, 2006), macrosystem changes in the

societal and cultural norms or changes in the provision of particular services can influence individual experiences (microsystems). The change in the role of extracurricular activities in the Finnish educational system is an illustration of such an effect. In line with the positive youth development approach, the justification for the change was the strong will to promote the development of the next generation by providing meaningful activities, enrichment, and protection from unstructured time “home alone”. The concerns about the before- and after-school hours of under-age children are not characteristic only of Finland, but widely shared in many Western countries (see NICHD, 2004), and the demands on the school to help parents to combine the needs of the family and working life have intensified. In post-modern society, the school is a unique social institution because it reaches the entire age cohort of children as well as their families. Instead of being fixed and immutable, the school should be seen as dynamic and responsive to the needs of the children, families, working life, and networked society.

The availability of extracurricular activities ensures that children have safe, protected spaces to spend after-school time and greater opportunities to participate in enrichment activities, such as academic clubs, arts, and sports. Yet, the selection of preferred activities is exceedingly meaningful, as differences in content and goals in activities lead to differences in children’s experiences and learning. Next, we review the literature that addresses the question of how and why children choose one set of activities over another.

## **2. How do children make extracurricular activity choices in middle childhood?**

Research on extracurricular activities has been heavily concentrated on adolescent samples. Therefore, relatively little is known about what kind of activities children are involved with in middle childhood and how they select their preferred activities. Evidence based on time-use studies (Posner & Vandell, 1999) and parental reports on children’s activity participation (Jacobs, Vernon, & Eccles, 2005) in the U.S. shows that boys and girls differ in their patterns of extracurricular activity participation. In this age phase, girls tend to participate in a greater variety of activities than boys (Anderson, Funk, Elliott, & Smith, 2003; Dunn, Kinney, & Hofferth, 2003; Jacobs et al., 2005). The most common activity for all children is sports (Covay & Carbonaro, 2010; Dumais, 2006; Fletcher et al., 2003; NICHD, 2004). Yet, boys are more involved in sports than girls, particularly in team sports. Girls, in turn, tend to be more involved with individual sports, handicrafts, and music/drama clubs (e.g., Jacobs et al., 2005; McHale, Crouter, & Tucker, 2001; Schumacher, Dimech, & Seiler, 2011).

The gendered patterns of participation, particularly in team sports, appear relatively robust across European and U.S. samples. Molinuevo and colleagues (2010) showed – with a Spanish elementary school sample – that it was more common

for girls to participate in dance, workshops, and music while boys preferred sports. Based on a Finnish sample of nine-to-ten-year-old children from the ISD program, Metsäpelto and Pulkkinen (2012) showed that girls preferred individual sports, arts and crafts, music, and performing arts more than boys who, in turn, preferred team sports and academic clubs (e.g., computer and multimedia clubs) more than girls.

The gender differences appear already in the lower grades of elementary school. Apparently, children in middle childhood start to develop socially construed representations of their own and their peers' identities, and participation in specific activities may provide opportunities to explore one's masculine or feminine self. Barber, Stone, Hunt, and Eccles (2005) pointed out that children and adolescents also express gender identity by participating in and valuing gender-appropriate activities. The team sport activities typically selected by boys emphasize achievement orientation and competitiveness, whereas activities popular with girls appear to be more centered on creativity and manual skills (e.g., arts and crafts).

Besides gender, various demographic factors also shape how children commit themselves to different activities (see Table 1). These factors include family income, parental education, socioeconomic background, and ethnicity, which may result in different opportunity structures for certain neighborhoods, unequal access to extracurricular activities, and differing rates of participation (e.g., Epps, Huston, & Bobbitt, 2013). Findings have repeatedly shown an advantage in participation rates for white middle-class children, at least in the U.S. samples (for a summary, see Theokas & Bloch, 2006). In a study of elementary school children, Covay and Carbonaro (2010; see also Dumais, 2006; NICHD, 2004) reported higher rates of participation for children whose family background was characterized by high socioeconomic status and higher parental education and income. Strong evidence of the importance of family income was provided by Epps et al. (2013) who used a random-assignment experimental design to test the impact of antipoverty intervention on children's extracurricular activity participation. Their study showed that the provision of earnings supplements, child care subsidies, and health care subsidies to low-income working parents increased children's participation in structured activities. Similarly, Dearing et al. (2009) found that family income was positively associated with children's activity participation, with the largest effect sizes evident for children at the lowest end of the income distribution. When examining racial differences, it has been found that white children are more likely to participate in extracurricular activities than blacks, Asians, Hispanics, and students of other races (Covay & Carbonaro, 2010).

Over and beyond demographics, family background also has other influences on activity choices. Parents, in particular, have a strong influence because they motivate, encourage, and permit extracurricular activity participation (Dunn et al., 2003). Anderson et al. (2003) found that the more parents supported and encouraged activity participation, the higher number of activities their 9-to-11-year-old children were engaged with. The younger the children are, the more influential parents are in providing children with specific experiences, for instance, by valuing



and enrolling children in certain activities. The findings by Jacobs and colleagues (2005) suggested that if mothers value particular activities, their children are more likely to participate in those activities and to value the activities themselves.

The activity choices also reflect more proximal influences such as individual agency. By middle childhood, children are increasingly active in selecting their environments on the basis of their interests and skills. Thus, the selection of extra-curricular activities reflects intrinsic motivation, children choosing activities on the basis of the enjoyment they get from performing the activity. Children also tend to select activities that they find personally important and feel competent about (Jacobs et al., 2005; Simpkins, Vest, & Becnel, 2010): Doing well and developing skills in such activities helps to build self-esteem and self-perceptions of competence. In addition to motivational factors, characteristics of children steer the activities they select. Using three-year longitudinal data, Posner and Vandell (1999) showed that high achieving third-grade children, characterized by better grades, work habits, and emotional adjustment, were more likely to be involved with academic activities and other enrichment programs in the fifth grade and less likely to engage in unsupervised activities (e.g., hanging out) than children who had been less successful at school. The findings by McHale and colleagues (2001) were similar in showing that better adjusted ten-year-old children became more involved in adaptive activities over time. Finally, activity choices are influenced by one's peer relations. As reviewed by Fredricks and Simpkins (2013), being with friends and developing new friendships are important motives for why children and youth join and stay in organized activities.

The findings summarized above demonstrate how children in middle childhood are active in selecting their preferred activities and how their activity participation is influenced by the larger social context. Some of the influences, particularly gender, seem to function relatively similarly across Western cultural contexts, while some other predictors of activity participation (e.g., race) are more salient in specific social ecologies. Indeed, research has shed light on the role of demographics while many other factors have been ignored. For instance, some children may choose activities that are atypical or unacceptable, which may cause social and psychological problems. Yet, the activity choices that run counter to the mainstream preferences are poorly understood and more research is needed to understand their developmental significance.

### **3. What are the benefits of activity participation in middle childhood?**

Children in middle childhood generally benefit from extracurricular activity participation (see Table 1). The difficulty with some of the studies is that they operate at a very general level, measuring mere participation in extracurricular activities. One such study by NICHD (2004) showed that consistent extracurricular activity in-

involvement during kindergarten and first grade was related to better math skills at age seven. The effect sizes when comparing consistent versus nonparticipation and consistent versus occasional participation were .30 and .23, respectively, indicating a small to moderate effect size.

More typically, the participation in various extracurricular activity domains has been specified. Sports involvement is the activity domain that has been included in most of the participation-outcome studies. Studies based on U.S. samples have shown that engagement in sports is concurrently related to higher levels of psychosocial maturity and social competence (Fletcher et al., 2003), and to lowered depression across two years (from 10 to 12 years of age; McHale et al., 2001). A study conducted with Swiss elementary school children showed that participation in team sports was related to lower social anxiety (Schumacher et al., 2011). In a Spanish elementary school sample, Molinuevo et al. (2010) showed that weekly sports participation predicted better concurrent peer relations and emotional adjustment in boys. In contrast to these positive findings, involvement in sports has been found to be related to experiences of stress (Larson, Hansen, & Moneta, 2006) and higher rates of alcohol use (Eccles & Barber, 1999) in adolescents, and to lower school grades in elementary school children (Posner & Vandell, 1999). The findings based on Finnish elementary school children in the ISD program (Metsäpelto & Pulkkinen, 2012) failed to find significant associations between sports and a variety of academic and socioemotional adjustment variables.

Instead of focusing on mere attendance or participation in one kind of activity only (typically sports), studies combining more than one activity domain are needed to address the question of whether participation-outcome associations differ depending on the type of activity. Findings based on other activity domains are suggestive of a positive influence of extracurricular activity participation on adjustment in middle childhood. Spanish elementary school girls benefitted from participation in a large category of nonsport activities (such as languages, computers, music), which predicted fewer emotional and hyperactivity problems, better peer relations and social competence, self-management and academic behavior (Molinuevo et al., 2010). An analysis of fourth graders in the U.S. showed that greater participation in club activities (e.g., scouts and 4-H clubs) was linked with higher academic grades and academic competence (Fletcher et al., 2003).

A limitation of many outcome studies is the reliance on cross-sectional data, while longitudinal data could provide new insights on how activity participation and outcome measures are connected over time. In addition, there is a paucity of studies investigating differences in adjustment variables between children exposed to extracurricular activities and those without such exposure (e.g., quasi-experimental designs). The use of comparison groups is worthwhile when estimating the differences between the developmental outcomes of children with and without participation. Although not providing causal evidence, such a design offers the possibility to gauge whether participation in the program plays any role in the development of children.



In the ISD program, we used a more stringent approach to test its effectiveness in improving children's socioemotional behavior and school achievement (Metsäpelto et al., 2010; see Table 2 for the list of samples, measures, and statistical analyses used). We investigated nine-to-ten-year-old children ( $N = 276$ ) who had participated in the ISD program for two years and compared their socioemotional behavior to the behavior of a nonintervention comparison group ( $N = 239$ ). Socioemotional behavior was measured using a 24-item teacher rating questionnaire (Multidimensional Peer Nomination Inventory, Teacher Rating Form; Pulkkinen, Kaprio, & Rose, 1999) and it concerned internalizing problems (depressive symptoms, social anxiety), externalizing problems (aggression, hyperactivity-impulsivity, inattention), and adaptive behavior (constructiveness, compliance, socially active behavior). Hierarchical linear modelling (Raudenbush, Bryk, Cheong, & Congdon, 2004) was used to compare the development of children with and without participation in the ISD and to account for the complex nested structure of our school-based samples. The results showed that the children who had participated in the ISD program for two years had lower levels of internalizing problem behaviors, both social anxiety and depressive symptoms, than the non-intervention comparison group. The effect size of the change in internalizing problems was .38, indicating a moderate effect.

As the next step, we used hierarchical regression analyses to investigate whether the duration, regularity, or the breadth of participation in the extracurricular activities was related to children's socioemotional outcomes, particularly internalizing problems. These analyses were in line with recent demands emphasizing the importance of capturing the various dimensions of activity involvement (Bohnert, Fredricks, & Randall, 2010; Farb & Matjasko, 2012). It was found that a higher number of years of participation (but not the number of different activities or the regularity of participation) was related to lower internalizing problem behaviors, particularly to lower social anxiety, at the end of the program. As an explanation, participation in extracurricular activities is known to provide opportunities for adult contacts and peer interaction, and to increase the likelihood of forming social bonds (for a review, see Fredericks & Simpkins, 2013). Activity participation in the ISD program possibly provided a host of positive experiences within the peer group and the larger school context, thereby decreasing internalizing symptoms. The longer duration of participation was the key dimension of extracurricular activity participation. As Bohnert and colleagues (2010) pointed out, it takes several years to form high-quality relationships with adults and peers. It also takes time to develop social and emotional skills, which may be operative in reducing social anxiety.

Another strength of the longitudinal data is that prior levels of outcome measures can be controlled in order to disentangle developmental benefits gained from the activity involvement from preexisting differences. Prior research has often ignored these so-called selection effects (for an exception, see Covay & Carbonaro, 2010). Moreover, instead of focusing on one kind of activity only, several activity domains should be investigated to address the question of whether participation-

Table 2: Description of the two studies on the benefits of extracurricular activities in the ISD program

Study	Sample	Measures	Statistical analysis	Key findings
Metsäpelto, Pulkkinen, & Tolvanen, 2010	<i>Experimental group:</i> 276 students (48 % girls), aged nine to ten years <i>Comparison group A:</i> 164 students (51 % girls) <i>Comparison group B:</i> 75 students (39 % girls)	<i>Activity participation:</i> A questionnaire, completed by the parents and children at home, producing information about the duration, regularity, and breadth of participation in extracurricular activities <i>Socioemotional behavior:</i> Multidimensional Peer Nomination Inventory, Teacher Rating Form (TR-MPNI; Pulkkinen, Kaprio, & Rose, 1999) with subscales for internalizing and externalizing problems, and adaptive behavior	Hierarchical linear modelling; hierarchical regression analysis	<ul style="list-style-type: none"><li>• Participation in the ISD program was related to lower internalizing problems (social anxiety and depressive symptoms)</li><li>• Higher number of years of participation was related to lower internalizing problems, particularly to lower social anxiety</li></ul>
	281 students (51 % girls), aged nine to ten years at the beginning of the three-year study	<i>Activity participation:</i> A questionnaire, completed by the parents and children at home, producing seven activity domains: individual sports, team sports, arts and crafts, music, academic clubs, performing arts, and youth programs <i>Socioemotional behavior:</i> TR-MPNI (see above) <i>School achievement:</i> Teacher ratings, using items developed in a Finnish epidemiological twin study (The Finnish Twin12; Kaprio, 2006) with subscales for academic attainments (reading, writing, arithmetic) and academic working skills (persistence, concentration, carefulness)	Multivariate analyses of variances (MANOVA); missing values were imputed by the iterative EM method	<ul style="list-style-type: none"><li>• Participation in arts and crafts and music activities was related to higher adaptive behavior: academic attainments, and working skills</li><li>• Participation in performing arts was associated with higher academic working skills</li><li>• Participation in academic clubs was related to higher academic attainments and lower levels of internalizing problems; longer duration (two to three years) of participation was generally associated with more positive outcomes</li></ul>

outcome associations differed depending on the type of activity. In the ISD program, we used three-year longitudinal data to investigate the developmental significance of a variety of extracurricular activities for socioemotional behavior and school achievement, controlling for the prior levels of outcome measures in order to account for selection effects (Metsäpelto & Pulkkinen, 2012). Participation in extracurricular activities was assessed by means of a questionnaire, completed by the parents and children at home before the program, and then annually at the end of each school year. The parents and children reported what kind of extracurricular activities the children had attended during the previous school year. Activities were classified into seven domains: individual sports, team sports, arts and crafts, music, academic clubs, performing arts, and youth programs (e.g., scouts). The yearly measures were summed up to represent the total rate of participation in different activity domains, ranging from “never attended” to “attended for 3 years”. Teacher ratings were used to measure socioemotional behavior (internalizing and externalizing problems, adaptive behavior) and school achievement, referring to academic attainments (reading, writing, and arithmetic) and academic working skills (persistence, concentration, and carefulness). The sample consisted of 281 children, who were nine and ten years old at the beginning of the study, and who were followed for three years. The amount of missing data, a frequent concern in longitudinal studies, ranged between 36 % and 40 % in the study variables. Missing values were imputed using the iterative EM method (see Metsäpelto & Pulkkinen, 2012).

The multivariate analyses of variances (MANOVA) showed that, after controlling for the grade level and prior level of outcome variables, participation in arts and crafts and music was related to children’s higher adaptive behavior, academic attainments (level of reading, writing, and arithmetic), and academic working skills (persistence, concentration, and carefulness). Arts and crafts involvement was additionally linked with lower levels of internalizing problems. Participation in academic clubs was related to higher academic attainments and lower internalizing problems, and participation in performing arts to higher academic working skills. As can be seen, the most consistent findings centered on the activities that fell into the broader category of the arts. Specifically, our findings indicated that the benefit of involvement in the arts seems to lie in the enhancement of positive development (i.e., adaptive behavior and school achievement), rather than in the decrease of externalizing or internalizing problems.

Some evidence has been put forward suggesting that extracurricular activities might be particularly beneficial for at-risk populations. Mahoney and Cairns (1997) have reported such effects using an adolescent sample. They found that among students who were at risk of leaving school, the dropout rate was lower for students who participated in extracurricular activities. In another study, African-American elementary school children from low-income families, who had been attending extracurricular activities over a three-year period, were reported by their teachers to be better adjusted emotionally in fifth grade; such beneficial developmental trajectories were not observed in white children (Posner & Vandell, 1999). Furthermore, Dumais (2006) found some evidence that children from lower socioeconomic sta-

tus families benefitted more from participation in extracurricular activities compared to children from more privileged backgrounds.

What, then, is known about the mechanisms that produce the favorable developmental outcomes? According to a review by Feldman and Matjasko (2005), activity involvement benefits children and adolescents, for instance, by providing opportunities for identity exploration, for the establishment of social networks of friends and adults, and for learning additional skills that extend beyond academic achievement. In fact, few studies have looked at the mediating factors in the association between activity participation and various outcome measures in middle childhood. Covay and Carbonaro (2010) studied the mediating role of student non-cognitive skills (e.g., attentiveness, task persistence, and eagerness to learn) in the relationship between extracurricular activity participation and reading and math scores. They found that some extracurricular activities, especially sports and dance, were related to an increase in noncognitive skills. Even more interestingly, much of the relationship between extracurricular activities and achievement in reading and math was explained by differences in noncognitive skills. Thus, extracurricular activities seemed to provide students with a site to practice and develop their non-cognitive skills, which were then translated into increased achievement in classrooms.

Another study explored links between free-time activity choices and adjustment, and looked at whether the social contexts of children's activities explain these connections (McHale et al., 2001). Links were found between the nature of children's free-time activities and their adjustment: structured activities such as hobbies and sports were most powerful in enhancing children's positive development, indicated by lowered depression. The findings provided some evidence of mediation. Involvement with hobbies was related to increased time with mothers: once time spent with mothers was taken into account, the association between hobbies and lowered depression became nonsignificant. Thus, the social context in which hobbies were undertaken was important in explaining the benefits of activity involvement.

## 4. Conclusions

Participation in extracurricular activities is only one dimension of the school experience. Yet, extracurricular and other organized activities can provide a wide variety of experiences and more quality interaction among students and between adults and students in the school, which may become translated into better socioemotional wellbeing and learning outcomes in children. Extracurricular activity participation is all the more important in early school years, because children who participate in activities during middle childhood are more likely to continue to do so during adolescence (Simpkins, Fredericks, Davis-Kean, & Eccles, 2006). Many activities, such as sports and music, require advanced skills that develop relatively

slowly: Middle childhood may be an important time for laying the foundations for these skills.

The present overview showed that the opportunities to participate in extracurricular activities are unequal, as race and ethnicity as well as family socioeconomic status often restrict the opportunity structures for non-white children from less affluent families. Unraveling the mechanisms that affect children's selection into contexts that shape their growth is a key task of current developmental research (Rutter, 2007). The previous findings are heavily based on U.S. samples, but they may be cross-culturally generalizable. Considerably more research with European children and youth is clearly needed.

Moreover, the findings summarized in this overview indicate that the consequences of extracurricular activity involvement in middle childhood are many-sided and likely to be explained by different measurement procedures, time spans (cross-sectional versus short-term longitudinal studies), and the use of a wide array of outcome variables. Future outcome studies should use activity measures that take into consideration the complex nature of activity participation. Researchers should look at the patterns of activity participation (e.g., multiple versus single activity) and the timing of participation, that is, whether concurrent, recent, or past participation may have implications for the association between participation and outcome measures. An aspect that has been neglected in the past research is the continuity of involvement in activities. Therefore, we know very little about the developmental consequences of long-term commitment (or lack thereof) to particular activities.

However, the findings of the current overview should be interpreted with caution. Our synthesis of previous studies was based on a literature review. By combining findings from different studies, we hoped to shed light on central themes in the current literature and to identify the key findings in the field. The next step would include a more systematic review procedure, for instance, in the form of meta-analysis. The findings on the ISD program, examining the significance of different extracurricular activity domains on socioemotional and academic outcomes, were limited to school-based activities. Yet, children also develop their skills and knowledge outside of school, and future studies should take into account this contextual variation in greater detail. Despite these limitations, the findings summarized in this paper underscore the significance of extracurricular activity participation as one of the influential contexts in which children and youth spend their time.

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