Malmö Youth Sport Program (MYSP)

Project

Since 2012, researchers from Halmstad University (HU), Lund University and Malmö University are engaged in a longitudinal and multidisciplinary research project called Malmö Youth Sports Study (MUSSE). The project is a continuation and development of the “Bunkeflo project”, which for nine years examined the relationship between children's health, academic achievement and engagement in sport and physical activity at school. MUSSE studies pupils at the Malmö sporting elementary school (“Malmö idrottsgymnasiet”) born in 2000 and 2001. The aim is to investigate the physiological, social and psychological factors that lead to a long and successful participation in sports. MUSSE has a distinctly multidisciplinary design where researchers from a number of disciplines collaborate. The project aims to answer important questions concerning the design and effects of child and youth sport, and implications for both “sports for all” and talent development.

Aside from MUSSE, two other projects are identified for the first phase of the program "Young people in and about the future of sport" and a Swedish development of the PAPA project in a Swedish context. These will be described below.

This research program has sustainable children and youth sport as its theme. The concept of sustainability is to be understood in a broad sense and includes physiological, psychological and social perspectives on sport. Moreover, it is normative in the sense that the purpose is to develop new knowledge and perspectives on how sport and the organization of sport can be developed. The aim is to increase the understanding of how to create an environment that simultaneously invites children and young people to participate in sport and develop a lifelong interest in sport and physical activity (a health aspect), and also enables successful talent development and identification.

Relevance and Importance for Sports

Children and youth sport is paradoxical. On the one hand, research shows that sport and physical activity during childhood and adolescence (0-18 years) has important implications for individuals' physical and mental health. Physical activity promotes both physical development and motor development, and prevents illness. Therefore it seems imperative to encourage young people both during school and leisure time to be physically active. On the other hand, research demonstrates that sporting activities offered by schools and associations may have negative consequences. A narrow focus on results and performance may result in exclusion of some children and young people, who consequently become uninterested in sport and physical activity. In addition, sport activities may be harmful socially, psychologically or physiologically for young people. Involvement in sport is determined by factors such as gender, socio-economic status, ethnicity and functionality. Boys and girls, as well as young men and young women are studied in the project. In addition, gender theory is used. MYSP aims to increase the understanding of how to create an environment that invites children and
young people to participation in sport and a lifelong interest in sport and physical activity (a health aspect), and simultaneously leads to successful talent development and identification.

Specific aim of the Program

Background and published results

In the Scandinavian countries a majority of the children participate in organized sport and PE and citizens in these countries are more physically active than citizens in many other countries. Even so, previous research has demonstrated that PE and organized sport do not necessarily have the expected effects in relation to health and talent identification.

The aim in the Bunkeflo Projekt was to study the long-term effects of increased physical education on motor skills and school performance. All pupils from a selected school born between 1990 and 1992 were included in a longitudinal study stretching over nine years. The intervention group (n=129) had daily PE and, if necessary, one additional lesson of adapted motor training. The control group (n=91) had two PE classes weekly. An important result was that daily PE and adapted motor skills training during the compulsory school years is a feasible way to improve motor skills, school performance and the proportion of pupils who qualify for upper secondary school [1]. There are, however, questions connected to the outcome: can the same effects be seen in another selection of pupils (Bunkeflo is a relatively well off area in Malmö). In MUSSE the studied group comes from a wider area of Southern Sweden. Another issue is actual program for the extra hours of PE – can the physical activity be more controlled (this is developed in MUSSE).

If sport and PE are supposed the deliver the effects seen in the Bunkeflo project children’s and young people’s participation in sport and PE is crucial. Both organized sport and PE has, however, been problematized in relation to who is participating and for how long. An area that has interested previous research is why young people choose to drop out of sport in their teens [2].

In Norway one third of the sport active young people drop out in secondary school (girls more than boys) [3]. Studies of Denmark have shown that there is a polarization – some become more physically active, others drop out [4]. A Norwegian study demonstrates that young people are physically active in for example gyms rather than in organized sports [5]. Organized sport has been challenged by new sports and extreme sports too [6]. In addition, people’s participation in sport is guided by their socioeconomic and sociogeographic background [7], and our choices are influenced by our socialization in relation to social and cultural contexts [8].

Drop out is higher in team sports [9]. It is explained by the fact that young women chose to sport in other arenas where they feel more at home. Previous research has indicated the importance of studying patterns of gender relations in order to understand patterns of physical
activity and sport in Sweden [10]. Similar questions will be answered within MYSP (Ingrell, Larneby, Hedenborg and the PAPA project). Another explanation of the drop out is related to time – young people demand flexible training hours [11]. In the Norwegian context studies on sport, ethnicity and gender have been conducted as well as research related to sport, sexual harassment and abuse [12]. In the Swedish context there are many questions in relation to young people’s choices that are not yet studied: studies of young people in big cities are lacking; not much is known about young people’s experiences and dreams in relation to intersectionality (there are studies on gender, but few on ethnicity and sexuality). Furthermore, studies of sport of sexual harassment and abuse are missing.

Methodology and work plan

Perceived pain, health and physiological performance in adolescents enrolled in schools with a sports profile (Olsson, Bremander)*

The aim is to investigate the relationship between sports involvement and performance, perceived health and pain in adolescents attending schools (grade 7-9) with a sports profile and how this influence their future success in sports, physical activity level, perceived pain and health. A secondary aim is to study how biological age influence sports involvement, physical activity levels and the decision future sport participation.

Validated questionnaires will evaluate health-related quality of life and perceived pain once a year. Physiological performance measurements will be measured once a year and include sprint, agility and power. Biological age will be assessed twice a year using height, sitting height, and leg length. The first studies are already conducted and the measurement will be continued until 2025.

Gender and Physical Activity (Karlsson)*

The aim is to examine gender and how physical activity gender specific improve bone strength and muscle function at growth, this since boys and girls response differently to exercise. The evaluation is targeted against young adulthood, then making it possible to determine if exercise improve peak values in young adulthood. This is of importance since 50% of bone mass in old age is determined young values.

The study includes evaluations of skeletal, soft tissue and muscle function. All techniques are in use in our laboratory and we have successfully conducted similar studies for 20 years. The first studies are already conducted and the measurement will be continued until 2025.

MYSS Physiology (Wollmer)*

In this study, a range of physiological measurements is performed, including measurement of aerobic fitness, muscle strength, cardiac examination by echocardiography, physical activity by accelerometry and pulmonary function measurements. Furthermore, body composition is measured by dual X-ray absorptiometry. These examinations, all made with state of the art
methods, provide comprehensive characteristics of the children’s physical development and abilities at the different time points studied. By virtue of the longitudinal design of the study, we will be able to determine the role of early physical development for success in sports. More important, however, the relative role of physical abilities in relation to psychological and social factors for success in sports can be elucidated. To our knowledge, this is a unique facet of the study. The first studies are already conducted and the measurement will be continued until 2025.

A Sport Psychology Perspective on Achievement Motivation in School Sports (Ingrell, Johnson)*

This PhD-project examines adolescents’ achievement goals, perception of motivational climate, behaviors, cognitions and effects regarding sport participation. In addition, the study investigates changes over time and whether there are differences between students at the Malmö sporting elementary school and the students who attend regular elementary schools. The study has a longitudinal and quantitative design [13]. Theories of achievement motivation are used [14]. The PhD-project started 2013 and will be concluded in 2016.

Gradings and Sporting behaviour (Ericsson)

The purpose of this study is to investigate the possible impact of early elite sports training on students’ academic achievements [15]. The study has a quantitative design and data is analyzed using non-parametric tests. Pupils admitted to the Malmö sporting elementary school in 2013–2014 are included while rejected applicants constitute control group. Bourdieu’s concepts of habitus and social/cultural capital, and Banduras’ concept of self-efficacy are used [16]. October 2014–October 2016.

Gender positions in School Sport (Larneby, Hedenborg) ‘

This PhD project examines gender structures in the Malmö sporting elementary school. The purpose is to study the adolescents’ experiences of and expectations on sport from a gender perspective. The design is ethnographic with focus group interviews, in-depth interviews and observations. The theoretical framework is influenced by a constructivist approach [17] The PhD-project started 2013 and will be concluded in 2016.

Sociological and Political Perspective on how to foster elite athletes and to promote an active lifestyle (Peterson, Norberg)

This project examines how to create environments for children and young people that promote a lifelong interest in sport and physical activity and simultaneously leads to successful talent development and identification. Theoretically, the concepts of Democratic fostering and Competition fostering are used [18]. In the first part of the project (Peterson), pupils of the Malmö sporting elementary school respond to questionnaires assessing their relation to sports,
and their parents on background social factors. The effects of Relative Age Effect in selection systems, both in the Malmö sporting elementary school and in sports clubs in general, are discussed [19]. In the second part, Norberg analyze the political implications of a development in which the state's public health goals unite/collide with the sport's interest in a successful elite. The first part will be continued until 2025; the second part: 1 January 2015–January 2016.

Young people in and about the future of sport (Hedenborg, Fasting, Knez, Larneby)

This project aims to deepen the understanding of young people’s experiences and ideas of sport, thereby creating a model for young people's increased involvement in shaping the future of sport. The project focuses on young people in several secondary schools all over Sweden, and the methods used are questionnaires (appr 200 questionnaires x3 times) as well as focus group interviews (appr. 30 groups x3 times) and in-depth interviews (appr 10 persons x3 times). The study consists of three parts. The first one is published and demonstrated great variances in relation to the respondents’ perceptions and dreams of sport [20]. The second study is ongoing and focuses on young people living in big cities (March 2014 to September 2015). Sociology of childhood as well as gender theory and insights related to ethnicity and religion constitutes the theoretical base [21]. A third study, involving a PhD student, will examine gender and ethnicity as well as sexual harassment and abuse [22]. Ethical approval will be applied for. This study starts in March 2015 and will be concluded in March 2019.

The program will welcome new research projects that focus sustainable children and youth sport. Some new projects are already identified: ethical questions in relation to “sports for all” and elite sport and children and young people and sport and new media (an important tool for young people in relation to their sport participation).

Preliminary Results

In the Bunkeflo Projekt the aim was to study the long-term effects of increased physical education on motor skills and school performance. All pupils from a selected school born between 1990 and 1992 were included in a longitudinal study stretching over nine years. The intervention group (n=129) had daily PE and, if necessary, one additional lesson of adapted motor training. The control group (n=91) had two PE classes weekly. Motor skills were measured by the MUGI observation checklist, and school achievements by the pupils’ marks in Swedish, English, Mathematics, and PE, and the proportion of pupils who qualified for upper secondary school. The sum of evaluated marks was higher among boys in the intervention group than in the control group (p<0.05). Daily PE and adapted motor skills training during the compulsory school years is a feasible way to improve motor skills, school performance and the proportion of pupils who qualify for upper secondary school [23].

The existence of Relative Age Effect is by now a widely recognized effect of selection systems within competitive children- and youth sport across sports and countries all over the world. In a study including all children born 1984 within the Swedish Football Association,
the Relative Age Effect was documented on all levels of the selection systems. Even the selection of players who had been rejected by the selection system, but still became elite players, was influenced by Relative Age Effects [24].

A first report is published from Young people in and about the future of sport [25]. The results demonstrate that young people’s experiences and dreams about the future are complex. There are, however, some common features pointing to that young people would like training hours to be more flexible and cheaper. It is also shown that many experience that it hard to start within organized sport as a teenager, which implies that if they drop out, they don’t find their way back. Young people request sport that includes both “performance sport” and “sport for all”. It is also obvious that their voices are not really listened to by the sport organizations.

Within the Papa several studies are published for England, France, Greece, Norway and Spain [26]. There are no preliminary results for the Swedish case.