Physical literacy among inactive Swedish young people

An interview study of a neglected group in sport science research

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Table of contents

1. Introduction .......................................................................................................................... 3
   1.1 Physical activity recommendations and guidelines for youth ........................................ 4
   1.2 Definitions of physical activity and physical fitness ....................................................... 5
   1.3 Sedentariness ..................................................................................................................... 5
   1.4 Theoretical frame of reference ......................................................................................... 6

2. Design ..................................................................................................................................... 8
   2.1 Sampling .......................................................................................................................... 8
      2.1.1 Selected districts and schools ................................................................................... 9
   2.2 Instruments ...................................................................................................................... 10
   2.3 Ethical considerations ...................................................................................................... 10
   2.4 Analysis and trustworthiness .......................................................................................... 10

3. Results .................................................................................................................................... 13
   3.1 Introduction .................................................................................................................... 13
   3.2 Motivation ......................................................................................................................... 14
   3.3 Competence ..................................................................................................................... 24
   3.4 The environment .............................................................................................................. 27
   3.5 Sense of the self .............................................................................................................. 29
   3.6 Self expression and communication with others ............................................................. 33
   3.7 Knowledge and understanding ....................................................................................... 35
   3.8 An overview of the quantitative results ........................................................................... 39

4. Discussion ............................................................................................................................... 42
   4.1 Some theoretical and methodological reflections ............................................................ 43
   4.2 Main results in relations to purpose and research questions ........................................... 43
   4.3 Concluding remarks ........................................................................................................ 46

References .................................................................................................................................. 48
1. Introduction

The health benefits related to physical (PA) in all ages have more and more gained acceptance and recommendations of PA have been developed for maintaining and improving health in most countries. Physical activity is an important factor, although difficult to measure, for young peoples’ health development. It is documented that children and adolescents who participate at higher levels of physical activity are less likely to display risk factors for early mortality, a lot of diseases and obesity. Vigorous physical activity has shown even stronger correlations with several health indicators, overweight and obesity. In addition, physical activity seems to have an influence on academic performance, perceived self-image and psychological/mental health (Hallal, Victora, Azevedo and Wells, 2006; Salmon, Booth, Phongsavan & Timperio, 2007).

A major issue in modern societies is an increasing gap between different social groups, which also affect the possibilities to live an active and healthy lifestyle. A large number of reports also depict a growing amount of young people in Europe as a high-risk group with regard to a healthy development. This group is often characterized as too fat and physically unfit and has additionally adopted unhealthy nutritional patterns as part of a sedentary lifestyle, which in turn will lead to negative consequences for the individual development and the social health care systems (Moreno et al, 2007).

We know, however, that all groups in society are not affected to the same degree by this unhealthy development. There are clear differences according to socio-economic status (SES), gender, age, geographical location between and within countries and cultural background of the individuals. Despite the existing knowledge about these differences it is not yet possible to fully explain the interplay between these (and other) factors and their impact on active and inactive lifestyles. Therefore the common aim of this European project “Active Lifestyles. Physical Literacy as a Way to Promote Activity in Inactive Groups”) is to: (1) know more about which factors foster and hinder the development of an active and healthy lifestyle and (2) if these factors are the same in different groups with regard to socio-economic status, gender, age (children versus adolescents), geographic (rural-urban) and ethnic-cultural background.

In the first phase of the project systematic reviews of relevant research literature were done in each of the six participating countries (Belgium, Germany, Great Britain, Greece, Italy and Sweden) to find out the most vulnerable subgroups among young peoples: the target groups for this phase of the project which was directed towards a qualitative approach with the help of focus groups interviews and individual depth interviews. The Swedish findings from the review of the research literature were reported in “Swedish young peoples’ lifestyles with focus on physical (in)activity and overweight/obesity – a review of the research literature” by Patriksson (2012).

The specific aim of this report is to present the main empirical results from the Swedish study, focusing to describe the lifestyles of young people in Sweden (Gothenburg area) with a particular interest in physical activity patterns in physically inactive groups.
1.1 Physical activity recommendations and guidelines for youth

The first formal physical activity guidelines for youth were formulated by the American College of Sports Medicine (ACSM) in 1988 (see Armstrong & Weisman, 2006). The ACSM based their proposal on guidelines for adults and recommended 20-30 minutes of vigorous exercise per day for children and adolescents. In 1993 an International Consensus Conference (ICC) presented the following recommendations based on a review of scientific literature:

All adolescents should be physically active daily or nearly every day, as part of play games, sports, work, transportation, recreation, physical education or planned exercise, in the context of family, school and community activities. Adolescents should engage in three or more sessions per week of activities that last 20 minutes or more at a time and that require moderate to vigorous levels of exertion (Sallis & Patrick, 1994). Although other guidelines were published, the ICC-recommendation was adopted in many countries worldwide.

In 1998 a British guideline sharpened the time recommendation for physical activity (of at least moderate intensity) to 1 hour per day (Biddle, Cavill, & Sallis, 1998), a recommendation that has been accepted in many countries, including Sweden (Becker et al., 2004). For small children younger than six years old physical activity and health-related guidelines recommend engagement in at least two hours of physical activity a day, half in structural activities and the remainder in unstructured free play (Haerens et al., 2010).

There have, however, been critical voices to these types of guidelines (see Twisk, 2001), which are considered too generally formulated, because there are different patterns of relationship for different health outcomes. Andersen et al., (2006) have indicated that 60 minutes of daily physical activity seem to be too little to prevent a clustering of cardiovascular disease risk factors including excess of fatness in children and adolescents. In their study they reported that 90 minutes of moderate to vigorous physical activity was necessary to have such effects, results that are mainly supported by (Ortega, Ruiz, & Sjöström, 2007), who concluded that 60 minutes or more of daily physical activity, if enough vigorous activity is accumulated during such a period, have strong correlations with lower proportions of overweight and lower risk of central adiposity among young people.

It is, however, important to emphasize that in this report/study the intention was not to measure the PA levels among the studied groups of (inactive) young people and to study how many of them that reached or not reached the PA recommendations. Focus was instead to describe their lifestyle with special attention to physical activity patterns and how they reasoned about such issues.
1.2 Definitions of physical activity and physical fitness

An often-used definition of physical activity is "a complex set of behaviors that encompass any bodily movement produced by skeletal muscles that result in energy expenditure" (Caspersen, Powell, & Christenson, 1985, p. 126). Physical activity encompasses all bodily movements independent of aim or context including for example play, hobby activities, games and sports. The total energy expenditure is the sum of the following items: basal metabolism which contribute about 60% of the total daily energy expenditure, the effects of the digestive system (about 10%), and the average physical activity level (30%).

Another closely related concept is physical fitness, which has been defined as "a set of attributes that people have or achieved that relates to the ability to perform physical activity" (Caspersen et al., 1985, p. 126). Physical fitness is usually seen as a set of different components. These include body composition, cardio-respiratory endurance/fitness (CRF), muscular endurance, muscular strength, balance and flexibility (Westerståhl, 2003). Physical activity and physical fitness have a close and complex interrelation to each other (mutually affecting), but there is far from a one to one relationship, because there are a lot of other variables (i.e. food, biological maturity, illness, drugs, genetic structures and environmental factors) that can influence and/or confound the relationship. Again it is worth noticing that in this research project the interest was not focused on the physiological aspects, measuring as valid and reliable as possible the frequency, intensity and duration of PA, but the emphasis was instead directed on the psychological and social experiences of physical (in)activity: it was an attempt to catch some glimpses of the social world that was lived by this group of mostly physically inactive pupils.

1.3 Sedentariness

A growing number of researchers think that increasing sedentary behavior among young people is a major determinant of reducing energy expenditure in a situation where energy intake does not have changed. Sedentariness is usually described as "sitting behavior" in front of TV, video screens and computers, but also a lot of other activities producing low energy expenditure as studying, talking with friends and passive transportations with different vehicles (Rey Lopez, Vicente-Rodriguez, Bueno, & Moreno, 2011).

Media consumption seems to play an important role in European adolescents' daily life, but look like to be stable over time (Brettschneider & Naul, 2007). There are also contradictory findings between sedentary behaviors and physical activity that makes it difficult to draw simple and straightforward conclusions (Todd & Currie, 2004). It is, however, impossible not to include sedentariness as an important factor when analyzing sports, physical activity and health related questions.
1.4 Theoretical frame of reference

Whitehead's (2010) concept of physical literacy was suggested to be the general theoretical framework for this project. Physical literacy is a rather new concept and has so far, to our knowledge, not been used as a theoretical tool for empirical research. According to Whitehead, physical literacy can be depicted utilizing six dimensions, A. Motivation, B. Competence, C. Environment, D. Sense of the self, E. Expression and interaction with others and F. Knowledge and understanding. More specifically, motivation regards aspects of a desire to be active (A1), to persist with an activity (A2), to improve physical competence (A3) and to try new activities (A4). A fifth motivation attribute can be connected to the so-called damaged motivation (A5) connected to previous experiences (see figure 1).

**Figure 1. The dimensions of physical literacy.**

**Competence** can be associated with the movement vocabulary\(^1\) (B1), movement capacities\(^2\) (B2), movement patterns\(^3\) (B3) and particular activities\(^4\) (B4). **Environment** concern everyday movement settings (C1, C2) as well as structured physical activity milieus (C3, C4). Walking, window cleaning and climbing a tree signifies everyday activities, while forms of dance, skating etc. are matters of structured physical activity. Within the theoretical framework of Whitehead both everyday movement settings and

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1. Rolling, crawling, walking, grasping, lifting, waving and clapping
2. Simple: such as balance, coordination and flexibility; combined: for example, poise (which requires balance and core stability) and agility (which combines flexibility, balance and coordination); complex: involving further combinations of capacities; for example, hand–eye coordination needing orientation in space, agility and dexterity.
3. General patterns (e.g. striking); refined patterns (e.g. development of striking as batting)
4. The final stage: contextually designed patterns that are called for in particular activity settings.
structured physical activities incorporate a “reading” and a “responding” dimension. Reading means that a person recognizes relevant practices, while responding signifies realization in terms of doing relevant practices. In relation to the “sense of the self”, a physical literate person understands that exercise should be more about enjoyment than about competition (D1), has positive previous experiences related to physical activity and exercise (D2), an effective involvement (D3) and participates as a person and not as an objectified body (D4).

**Expression and interaction** deals with issues of affluent self-expression about and through physical activity (E1), while a physically literate person participates perceptive and is empathetic with others in physical movement settings (E2). Furthermore, the physically literate person is not only sensitive (E3) but also aware of other “embodied” persons in a reciprocal way (E4). Finally, **knowledge and understanding** is connected to the ability of identifying and articulating physical activity cultures and settings (F1), to identify and articulate their own engagement within cultures and settings (F2), to access a propositional knowledge (F3) with a corresponding involving language (F4) and a clear understanding of the benefits of physical movement towards qualities of life (F5). Propositional knowledge incorporates both a pre-reflective and a reflective phase.

With this theoretical frame of reference in mind the **research questions** can be specified in the following way:

1. To describe the lifestyles of physically inactive groups of young people in terms of physical literacy, that is motivation, competence, environment, sense of the self, expression and interaction as well as knowledge and understanding.

2. To explore gender and age specific patterns.

3. Try to find facilitators in the environment that might increase the possibilities for physical activity/physical literacy.
2. Design

2.1 Sampling

Sweden is a modern welfare state with a good and stable economy. It has a population of 9.5 millions peoples living in an area of a little more than 528 thousands square kilometers. The population density is 21 inhabitants per square kilometer. About 81% of the population is of Swedish origin, while 19% have a foreign country background. The proportion with a foreign background has increased rather dramatically during recent years, especially in the three largest urban metropolitan areas (Stockholm, Gothenburg and Malmö). Since the project leader in Sweden belongs to the University of Gothenburg, the Gothenburg area was chosen to conduct the study for practical and economic reasons. The Gothenburg metropolitan area has a population of about 940 000 individuals spread over an area of 3700 square kilometers and has a population density of 254 inhabitants per square kilometer.

Like most big cities Gothenburg is rather segregated with distinct varieties between different parts of the city regarding proportion of people with a foreign country background (immigrants), income, living standards and educational level. From the Swedish literature review (Patriksson, 2012, p 30) it was shown that the target groups among young people in Sweden ought to include “…overweight and obese individuals from low socio-economic groups, inactive adolescents from rural areas, immigrant children and adolescents with a background, primarily from outside Europe.”

In accordance with the general guidelines for this research project a strategic sampling procedure (non-random sampling) was considered as the most adequate way to handle the situation. The selection process included a multi-stage procedure. In the first phase relevant statistics from the ten different districts of the city of Gothenburg were analyzed and those areas, which best fulfilled the criteria set up (low SES, low education level and a high proportion of immigrants) were chosen (three districts). In the next step lists of schools in these districts were collected and via the home-pages of the schools it was possible to identify a number of relevant schools in relation to the age groups/grades (12-14 years and 15-16 years) that we wanted to study.

The general guidelines from the project coordinator at University of Paderborn were, in large, followed when contacts with the schools (headmasters) were taken. Phone calls in combination with project information via mail communication were used to ask if they were willing to participate in the project. It was a long and drawn out process – more than two months (February to April 2012) – until the requested number of schools accepted our project in their schools. Some schools argued that they were already involved in several investigations and that they had so many internal problems to handle (sick leaves for teachers, overloaded teachers, criminality among pupils with police interventions, a lot of national knowledge tests during this period of time, etc.)
that it was difficult for them to take part in the study. Finally four schools were willing to take part in the project.

In the last phase a PE-teacher in each school (recommended by the headmaster) was contacted and asked to select a certain number of pupils who met the following criteria: uninterested in the school subject physical education (PE), not active members in a sport club, having an immigrant background and/or coming from a family with low SES. Surprisingly several of the PE-teachers said that they had some problems to find pupils, especially among boys, who lived up to such criteria. An explanation could be that PE in schools in general is one of the most popular subjects (Larsson, 2004) and that the Swedish sports movement has been very successful in recruiting young people to sports clubs. About 90% of all children and adolescents have at least some time been a member of a sport club (Wagnsson, 2009).

A few pupils (2 persons) refused to take part and were replaced by other similar pupils. In three of the four schools the pupils who were selected were, on the initiative of the headmasters, offered a cinema ticket if they accepted to participate in the interviews. It could be concluded that the final sample (see below) was not quite ideal in the sense that there were a number of pupils who did not fully match the criteria for selection (for example liked PE and/or were member of a sport club).

2.1.1 Selected districts and schools

The district of Angered has a population of 48 308 inhabitants (2010). The average income was 158 000 SEK and 69% was born in other countries than Sweden. In total, 26% of the population had a post-secondary education. Two of the selected schools were situated in this district. In school 1 (n=400 pupils), pupils from grade 7 (13-14 years of age) took part in focus groups interviews (n=9). School 2 had 350 pupils and 13 pupils from grade 7 participated in focus groups interviews. Moreover five (5) pupils from grade 9 (15-16 years of age) were engaged in individual interviews.

The district of Eastern Gothenburg has a population of 44 500 inhabitants (2010) and had an average income of 163 000 SEK. The proportion of people who had a post secondary education was 33% and 54% were born abroad. One school (school 3) was situated in this district. It was a school with 500 pupils. From grade 7 eight pupils were selected for focus groups interviews.

The district of Western Hisingen included one school (school 4) with 330 pupils. Ten pupils from grade 7 participated in focus groups interviews and six pupils from grade 9 took part in individual interviews.

In total 51 pupils were interviewed. 11 individuals (4 boys, 7 girls) took part in individual interviews and 40 pupils (19 boys, 21 girls) in focus groups interviews. The total sex distribution was 23 boys and 28 girls. All focus groups interviews were carried out in single sex settings. 48 of 51 informants had a foreign country background and a majority of them came from non-European countries. All the interviews were
conducted by nine specially trained students from the Department of food and nutrition, and sport science at University of Gothenburg doing their work with bachelor theses.

2.2 Instruments

The instruments used were mostly worked out at the project coordination center at University of Paderborn (Hans Peter Brandl-Bredenbeck, Marie Biermann). The main instrument was (1) a semi structured interview guide, (2) the “Affluent Scale” (Currie, et al, 2000) to measure SES, (3) a weekly time table to mark and identify the pupils’ daily activities, (4) a map covering the neighborhood of the school, where important places for different activities could be marked, (5) a short questionnaire about their parents’ (father and mother separately) views on school, leisure time, their living area, sport, physical activity and health and (6) color pictures of sport and physical activity situations. All instruments and guidelines from the project in Paderborn were written in English. Therefore all the material had to be translated into Swedish language. This was done in collaboration between the project leader in Sweden and the co-workers (the bachelor students).

In the Gothenburg part of the study we used all the centrally produced instruments, but made some small changes in the interview guide, where some additional questions about food habits were included. We also added some more pictures/photos about sport and physical activity situations to get a more varied offering for the pupils to respond to. Moreover, some extra pictures on different kinds of foods and meals were added, but the answers/responses to these pictures have, however, not been included in this report. This material has been used in five bachelor theses written in Swedish together with parts of the other interview material.

The central protocol from Paderborn, on how the interview procedures should be carried out, was followed in all essential parts. All preparatory meetings and interviews with the pupils were done during school time in secluded rooms and no disturbing incidences occurred. Each interview – both individual and focus group – were done during one lesson (about 45 minutes).

2.3 Ethical considerations

The ethical rules of the Swedish Research Council that were applicable on this project have been followed. The four most important principles are the demands of being (1) informed of the research, (2) of consent/approval, (3) of confidentiality and (4) use of the data. Concerning the consent issue approval to the study was given by the school headmasters and for those pupils who were below 15 years also from the parent(s)/guardian(s).

2.4 Analysis and trustworthiness

All interviews were audiotaped and transcribed to a word processor by the bachelor students. For the analyses of the interviews both texts and audio have been brought into a Nvivo file to facilitate the coding procedure using predefined nodes (Richards, 2009).
When the material was entered into Nvivo 10 software in different folders, a linkage was upheld between each interview and individual. The interview text was looked through several times before the actual coding was done with the purpose to find material that could be linked to the separate dimensions. All the interviews were then, again, read through, focusing on the first main dimension of physical literacy “Motivation”. The quotes were coded in nodes representing the six subcategories of “Motivation” (see section 3.1). The same procedure was made with each of the other five main dimensions of Whitehead’s (2010) theoretical system. A second researcher also went through the material to assess the consistency in the interpretations of the quotes. In a majority of cases the coding was the same. When disagreement occurred the two interpreters discussed the cases and found the best solutions on the basis of the various definitions within the theory of physical literacy and the young peoples’ use of language. In the next step the nodes were classified in four groups according to gender and age; young boys, young girls (12-14 years old) and older boys, young girls (15-16 years old).

In qualitative research it is often difficult to use the traditional concepts of validity and reliability and other terms in the same way as in quantitative research. Therefore it was preferred to discuss such issues in this study in another terminology developed by, for example, Guba (1981) and Shenton (2004). The concepts that will be used are credibility (in preference of internal validity), transferability (in preference of external validity/generalizability), dependability (in preference to reliability) and confirmability (in preference to objectivity).

To establish credibility (internal validity) the investigators tried hard to become familiar with areas and schools studied through visits in advance and through reading relevant documents and other relevant information (see section 2.1). In addition, the strategic sampling of schools within predetermined areas/districts with a high degree of lower SES and high proportions of people with a foreign background have probably contributed to an elevated credibility. The selection process of pupils within each school followed a strict procedure asking headmasters and PE-teachers for individuals with certain qualities. This strategy was chosen to increase the credibility. In spite of this “objective” procedure some pupils, who were more physically active than intended, came to be included in the sample. However, these few individuals were well aware of the culture of sedentary behavior that existed among many young people in their surroundings and were able to give relevant and valuable answers to the interview questions. Furthermore, using both individual and focus groups interviews might be seen in the light of triangulation, which according to several sources (see Shenton, 2004), can result in increased strength of the study. In sum, all the efforts that were undertaken indicated that the credibility of this study was good.

The transferability (external validity) of the findings can be argued on the basis of the sampling procedure, that is the group of young people have been selected representing a much broader group of individuals with a background of foreign origin and living in
areas characterized of low socioeconomic status. These facts seem to give the results a high degree of transferability to other similar groups and settings.

The **dependability** (reliability) of the findings is based of the research design and the detailed instructions to both interviewers and informants. Furthermore, the principal investigator went through all the audiotaped interviews as well as the transcribed material. In terms of **confirmability** (objectivity) this study was linked to a more theoretical “audit trail” (Shenton, 2004), which is considered as preferable in comparison to a data-oriented one and in combination with a rigorous (described earlier in this section) classification/coding procedure, these characteristics of the study could be seen as important measures to get a high degree of confirmability.
3. Results

3.1 Introduction

The research review done in this project about physical (in)activity in Sweden (Patriksson, 2012) gave strong evidence that there were more girls, especially in adolescence, who were physically less active than boys (Dencker et al., 2006; Engström, 2008; Larsson, 2008; Rasmussen et al., 2004; Wagnsson, 2009; Westerståhl et al., 2005), adolescence were less active than children irrespective of gender (Berggren, 2001; Engström, 2008; Hurtig Wennlöf et al., 2006; Raustorp & Ludvigsson, 2007; Raustorp et al., 2007; Wagnsson, 2009; Westerståhl et al., 2005) and older girls in practical educational programs had lower levels of physical activity and physical fitness (Berggren, 2001; Westerståhl et al., 2005). There were also tendencies that young people of both sexes coming from lower SES were less physically active (Rasmussen et al., 2004; Wagnsson, 2009).

The research conducted in Sweden in the area of physical activity can be characterized as almost totally quantitatively directed, striving for objective measurement of physical activity and to receive data which could be generalized to larger populations. Very few studies have had a focus on groups of young people with low interest/motivation in sport and physical activity and these studies have also had a quantitative approach. Obviously there is a lack of knowledge coming from studies of low motivated groups and with a qualitative focus. It is the ambition of the “Active lifestyles” project to reduce the knowledge gap in this area.

All the interviews were transcribed (441 pages) and later coded, inspired by Whitehead’s (2010) theoretical work, into six main categories and subcategories using the program Nvivo 10. This way of categorizing the material can be called “theory-driven” (see also section 2.4).

The results will be presented for each main category divided into subcategories with both descriptive statistics (diagrams and tables) and typical quotations under each heading. Within each subcategory there is also a further division into sex (boys and girls) and age (13-14 and 15-16 years of age), which makes four groups: young boys (YB), young girls (YG), older boys (OB) and older girls (OG).

A general problem in interview studies, where a qualitative approach is dominating, is how to handle the number of quotations in the presentation of results. This is a delicate matter. Too few can give an inadequate picture that do not mirror the variation in the material and too many can be boring for the reader. In this case it was decided to go a middle way and include rather many extracts to give the reader a chance to make acquaintance with the social reality of the informants that might be rather unknown for a majority of individuals (probably involved in sports and PA) who will read this text.
The aim with the quantitative presentations is to give a broad overview of the distributions of quotations/nodes in both main- and subcategories. The distributions in the four subgroups must, however, be interpreted with caution (particularly in comparisons between younger and older pupils), since they differed in terms of number (n). The young ones have all participated in focus groups interviews (n=40), while the older ones have taken part in individual interviews (n=11). The much larger number of young pupils has thus a higher probability of producing more quotes than the older groups in the interviews. This probability can, however, be counteracted by their young age (less verbal production) and the focus group situation, where it is easier for young people to agree with the former speaker and just saying short words/sentences like “yes”, “hm” and “me too”. Such tendencies are empirically supported in the transcribed material: the younger groups produced fewer words than the older groups did in individual interviews.

3.2 Motivation

Motivation to take part in physical activity is by Whitehead (2010) and many other researchers considered to be a fundamental attribute in being physically literate. This broad concept has in this study been divided in six subcategories where the first four are presented by Whitehead. The fifth dimension "Damaged motivation" (A5) were deducted from Whitehead’s reasoning and the sixth subcategory “Screen-based inactivity” (A6) has been shaped as a subdomain of motivation since it is disturbing pupils’ motivation to be physically active.

In total, the largest amount of the analyzed text was classified into “Motivation” (266 markings) compared to the other five main categories. The first subcategory (A1) was named “A desire to be active”. Since a major inclusion criteria in this study was not to be interested in school PE and not to be a member in a sport club (as written earlier in this report these criteria were in some cases not fulfilled due to misjudging by some PE-teachers), one could suspect that there should be rather few examples in this subcategory.

Diagram 1. Motivation. Nodes/group

<table>
<thead>
<tr>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>A4</th>
<th>A5</th>
<th>A6</th>
</tr>
</thead>
<tbody>
<tr>
<td>YB</td>
<td>29</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>YG</td>
<td>18</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>OB</td>
<td>12</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>OG</td>
<td>27</td>
<td>9</td>
<td>0</td>
<td>4</td>
<td>35</td>
</tr>
</tbody>
</table>
It was, however, not difficult to find a lot of examples from the interviews that were placed in that category (see diagram 1). In total 86 nodes were found. Most examples (29) were from young boys (YB), closely followed (27) by older girls (OG).

Below are some illustrative examples, which also show that at least some of the informants reflected seriously upon sport activities:

Example A (older boy)

*Interviewer: Why is it fun to play football?*

_You can never know what’s going to happen, if you win or lose. You can learn new things, you have to cooperate. You cannot play alone._

Example B (older girl)

_Tennis and cycling and swimming are funny, yes very funny. I played tennis before, but swimming is fun. You have to exert and you get in a better shape. It is fun._

Example C (older girl)

*Interviewer: Is it fun to do yoga?*

_Very funny, also relaxing. I also like to climb a lot (looking at pictures showed by the interviewer). It looks very funny and interesting. Otherwise we use to play table tennis and sometimes basket. And this is athletics/high jump or, we use to do it on school sport days._

*Interviewer: high jump? Or athletics?*

_Yes, very often. So it is very funny._

*Interviewer: Do you like to take part in the PE-lessons?*

_Yes, when you do something together it is fun, but not if you always are alone and so. But if you do something together then it is funny. When I was young I played tennis. I played often in summertime at the tennis court at (a name). There I often go with my friends or with my sister. So we use to play a whole day if it is available. So we think it is very funny._

Example D (younger girls in a focus group interview)

*Interviewer: What do you use to do?*

_Basket._

*Interviewer: And you, do you play ballgames? (Asking another girl.)*

_Ah, always._
Interviewer: But how do you do then?

Well, where I live there is a kind of football ground where boys and girls play or say girls play against boys or we organize teams, we are about thirty or more.

These quotations clearly show that there were individuals in this group of 51 young people who, for a variety of reasons, really enjoy to do sports and to be physically active. There was a tendency in the interview material that the informants pointed out the social dimensions of the activities and the possibilities to initiate and establish social relations.

The subcategory “To persist with an activity” (A2) is also an example of a “positive” dimension of motivation. As can be seen in diagram 1 this was an aspect that has not been communicated very much (n=25) and the differences between the subgroups were in general very small. Some typical examples from the conversation with the young people will illustrate how they talked about it.

Example A (older girl)

Interviewer: What do you think is boring or funny?

I use to swim some times a week or so. It depends on when I have time.

Interviewer: Where do you swim?

At an indoor swimming bath (a name).

Interviewer: Do you practice alone?

Yes, because I have back pains and need to strengthen my muscles.

Interviewer: How often do you run?

During the summer I run twice a week, but during the winter I do it perhaps twice per three weeks. It depends but I like to run when it’s raining, which is very curious.

Interviewer: Do you like the PE-lessons?

Yes, when you do something together it is funny, but not if you do things alone or so...I played tennis when I was younger rather often at the tennis court at (a name). So I use to play there with my friends or my sister. We use to play from morning to evening if we are free.

Example B (younger boys in a focus group interview)

Interviewer: Football, how often do you practice football?

Three times a week.
Interviewer: Do you play in a club?
Yes, football in (the name of the club).
Interviewer: And you (to another boy) ?
I play in (the name of the club)
Interviewer: Is it often?
Well, every Friday perhaps, Friday Saturday.

Example C (older boys)

Interviewer: Do you cycle?
Every week.
Interviewer: Where do you cycle?
From (the name of a place) to (the name of a place)
Interviewer: Why?
Only for practicing.
Interviewer: Is it funny?
Ah, it is funny too.

Interviewer: do you practice something else when you have cycled to (the name of the place)?
Yes, I do twice a week.

Interviewer: How do you like that?
Oh, funny.

Even if there were rather few examples in this category it was again shown that the cooperative potentials of sports were emphasized as well as recreational aspects. Example C above was a very typical illustration from large parts of the interview material: the answers from the informants were usually very short and mirror the difficulties that most of these pupils had to express themselves on this topic.

Very few examples (n=6) from the interview text were classified in the third subcategory (A3) called "To improve physical performance". It was only in the group of older boys these examples were found. Generally it was not a surprise that this dimension had a low frequency (in this specially selected group) since it is a "demanding" criterion, which includes improvement rather than just participation in a
physical activity/sport. The following quotations are good illustrations of what kind of text that was placed in this category.

*Interviewer: Why is it so funny to play football?*

*You have to learn new tricks... you need to associate, teamwork, you have to cooperate with the people. It does not go to play alone. Must do some passes and so.*

*Interviewer: So it is funny to be with the friends?*

*Ah, you have to practice the shots too so they hit the goal and not overshoot the mark (laugh a little). Ah, it is funny...it is better to built up your health than for example those who smoke and lose condition...it is much more healthier to live a sports life.*

One could also in this example observe the social aspect of sport.

The fourth dimension of motivation was named "**To try new activities**". There were also few markings (n=11) in this node. When one interviewer showed the pictures of different physical activities in two individual interviews the following short conversations took place:

Example A (older girl)

*Interviewer: What do think about these pictures? Is it something that you have tested?*

*Yes, almost everything in fact, besides climbing, real climbing. But it looks like very funny and I really want to test it now when I am thinking of it.*

A similar reaction from a boy is shown below.

Example B (older boy)

*Interviewer: May be climbing?*

*Oh, I would like to test because I have never done it.*

In this group of mostly physically inactive youngsters there were few indications of a real will of trying out something new. The curiosity level in this sphere of life seems to be quite low. How has it come to be like this? One reasonable, among many others, explanation of this lack of motivation to test new activities can probably be found in these young peoples’ earlier experiences of participation in sports and similar activities. In the fifth dimension (A5) of motivation called "**Damaged motivation**" there were a lot of reasons to believe that one could find negative experiences of sport participation.

This subcategory has the highest frequency of markings (n=91). There were about double as many text passages expressed by girls compared to boys that has been
classified as "Damaged motivation". Among boys there was a tendency that the younger ones more often have had pronounced negative experiences, while it was an opposite trend among girls: more older girls have given examples of negative experiences than younger ones. These results were in line with what previous, mostly quantitative, research has shown (Lindgren, 2002; Norberg, 2012; Lundvall & Safizadeh, 2012).

"Damaged motivation" will also be illustrated with extracts from both focus groups interviews and individual interviews. Firstly, a part of the conversation in a focus group interview with four boys that showed some common situations:

Example A (younger boys in a focus groups interview)

... you think it is laborious, you know tiresome, you know you become like tired...
For example in our training sessions we used to have coaches who sometimes used to be so angry on us if we didn’t listen. We were punished to run around the whole playing field all the training time (Note: football).

Oh I was tired of it, what’s it name now, basketball, I became too old and it was tiresome and hard to learn... and table tennis I couldn’t come in time because school stopped late.

Handball wasn’t fun and football was too laborious, because I came to a team who had practiced a lot and I had not played at all and it was difficult and I have tested swimming also but, oh, a swimming school.

In these quotations one could clearly see examples of ill treatment of these individuals from both the individual (coach) and organizational (sport administrative) levels and external factors (school) that affected their sport interest in a negative way and seem to destroy their motivation for sport and physical activity. Another factor seen in the interview material influencing the motivation negatively was fear of shoving/exposing oneself in front of others in sport situations inside and outside school. Here are some examples.

Example B (older girl)

I do not know, I feel it less embarrassing to train alone than with, let say 30 people, who use your equipment that you use at that time.

Interviewer: If someone looks at you when practicing what is embarrassing?
I do not know. It just feels awkward when somebody stands and looks at you, hehe.

Interviewer: Are you not playing (football)?
No. It is painful if people sit and look at me when playing. It is very painful.

Interviewer: Why?
I think it is painful because I think I’m bad…I do not like when people look at me because then I can’t do my best.

Many of the informants had a low interest/motivation for PE in school. A typical conversation from a focus group interview with five girls is shown below:

Example C (younger girls in a focus group interview)

*Interviewer: Do you use to go to the PE-lessons?*

*Not often.*

*I go if I don’t forget my sport cloths (laughing)*

*Interviewer: Is it easy to forget the sport cloths?*

*Ah, I don’t know.*

*Interviewer: How does it come that you don’t like PE?*

*I have never liked it.*

*I do not like it.*

*Interviewer: What’s wrong with it?*

*Boring.*

*Interviewer: What is boring?*

*Everything. The things you do in PE are boring.*

These female informants showed a total lack of interest in PE, but also an inability to explain why they did not like it and why they felt that it was boring. It seemed that they lacked the knowledge and the linguistic tools to express their feelings in this area.

Many of the informants in this study have been member of one or more sport clubs. As much as 90% of Swedish children and youths have been a member of the sports movement for a shorter or longer time at some time of their life (Wagnsson, 2009). It seemed, however, that in this group of young, mostly inactive, people many have tried one or more sports for rather short periods of time. Another characteristic pattern was that they have dropped out from sport(s) several times, sometimes going in and out with short intervals but then staying outside organized sports (see also Patriksson, 1988). These extracts from a focus group interview with boys showed some typical examples from the conversation.

Example A (younger boys in a focus groups interview)

*Interviewer: Did you stop with sport a long time ago?*

*Yes, rather long ago.*

*Interviewer: And somebody else?*
Yes, one time I left a club, I was there only one time.

Interviewer: One single training session. Why did you not come back?

It was too tough.

Interviewer: What was too tough?

I don’t know, there were one million people and all only ah ah ah…It was too much.

Example B (Younger girls in a focus group interview)

Interviewer: Are there anybody who do some sport or other activity?

I played football but stopped.

I too (another girl).

Interviewer: Did you play in clubs?

I played in two clubs but ended.

Yes (two other girls).

Interviewer: Do you still play or have left the club?

I left last year.

I don’t remember but I think it was last year (another girl).

Yes (another girl).

Two years ago.

This conversation continued during some time in the group discussing this theme, sometimes quarrelling about why they played or why they left sport,

An extreme example of going in and out of sport is from an individual interview with a boy.

Example C (older boy)

I have then tested judo, I thought it was funny but it was like difficult so I began, then I stopped but then I started again, then I left, then I started, then finished and then I started again and then I stopped.

Interviewer: Oh, four times haha.

Well, I think it was six times.

Interviewer: But how does it come?
I thought it was funny but it was also difficult so I like stopped, then I thought I wanted to start again, but then I noted that it did not become easier because you begin and start every time.

Interviewer: I can think so. But then it is something you really enjoy.

Yes in a way.

Interviewer: Have you thought of taking it up again?

No, no it is no idea. I will still stop again.

In the last subcategory – "Screen-based inactivity" - 47 markings were registered. Among the younger group there was slight difference between boys and girls; boys referred more often than girls to screen-based activities when talking about reasons behind their low physical activity. A difference can also be seen between younger and older adolescents, where the younger were more inclined to mention their dedication to watch TV and play computer games etc. Similar results have been obtained in other Swedish studies (see Patriksson, 2012). It was, however, interesting to note that these findings also occur in a low physically motivated group as this sample comprise. It was obvious that screen-based inactivity played a big role in the life of many young people in this study. Some of them were more or less obsessed of computer games, looking at TV etc. and in addition some were also aware of this but had difficulties to change their habits. Most of the quotations in this section were from that part of the interviews when the interviewer went through the answers in the weekly timetable, where the pupils should mark and identify their daily activities. Since the highest frequency of text classified as “Screen-based inactivity” came from the two younger groups quotations from these groups will dominate the examples below.

Example A (younger boys in a focus group interview)

Interviewer: What is the best during the whole week?

To play computer games (boy 1).
To look at films (boy 2).
To look at films (boy 3).
Films (boy 4)
Computer games (boy 5).
Computer games, cycle, play basket (boy 6).
Interviewer: Say something more of this.
Wake up, go to school…I do my homework early in the evening. I play computer games and later in the evening I look at movies and around ten I go to bed (boy 1).

18 to 20 I look at TV, ah, 20 to 22 I play computer games and then sleep (boy 2)

The conversation continued like this in several pages in the transcribed interviews. Examples from another focus group interview with girls are shown below.

Example B (younger girls in a focus groups interview)

Interviewer: You end school rather early on Fridays. What do you do then?
Play computer games (girl 1).

Interviewer: What do you play?
Facebook (girl 1).

Interviewer: And you?
I have no Facebook, play computer games (girl 2).

Interviewer: What is the difference between Fridays and other days?
I do shopping, sms, Internet and Facebook and out with friends and I walk (girl 3).

Interviewer: And what is the difference for you?
On Saturdays I sleep, sleep again, breakfast in the city center with friends, out, eat, look at films, look at TV again (girl 4).

Interviewer; And you also play football?
Yes (girl 5).

Interviewer: And you?
No, I do not go out, I hate to be out. I prefer to be indoors (girl 1).

Interviewer: Why?
I am a computer manic (girl 1).

The quotations above indicated that girls more often than boys mention Facebook and other social media than boys, which is also documented in other studies.

In summary, the reasons for inactivity in relation to motivational aspects that were found in these analyses were (all are not documented in the reported quotations):
screen-based inactivity, homework, other hobbies (non sports), low physical competence, tiredness and laziness.

Another way to look at motivational aspects of sport and physical activity was to focus only on some of the pictures shown to the pupils, in this case the pictures of extremely well trained persons (body builders), and give examples of what reactions they elicited in the interview situations. The examples will be drawn from the focus groups interviews.

The girls spontaneous opinions about the pictures were like these: “oh my god”, “how ugly”, “take care of that”, “may be a six-pack”, “girls shouldn’t look like that and it looks crazy”. One girl said that the woman on picture 5b does not looks that exaggerated but looks healthy. The woman on picture 5b, on the other hand, looks like she had taken injections. Another girl expressed herself that she thinks that the woman had used anabolic steroids. The boys’ attitudes were that they “overplayed”, “were strong and happy”, think that they “are something” and that everybody was affected by anabolic steroids.

When they were asked if they could be as physically active as the individuals on the photos, some of the youths, rather surprisingly, thought that they could be as active as the persons on the pictures. One of the boys had earlier practiced strength training for a short time but stopped. Three of the boys in this focus group interview regarded strength training as something one should not devote oneself in their age (could be dangerous). Another boy was not sure if he could be that active and another one thought that everybody could if they had a strong will. And still another boy meant that one has to fight and not give up, but he himself did not want to be so physically active. Several of the boys in this group pointed out that there were no barriers for sport and physical activity; neither parents, economy (money) or time. It was obvious that a few of the informants have some – often rather short - experience of sport and training and also some knowledge of the strains and risks such activities demand. Their verbal expressions may also show the latent wishes/dreams they have, but they seem to be aware of how hard it is to realize such ideas without great efforts and it seems therefore that the most probable reaction, in the social-cultural circumstances they are a part of, is to avoid such activities.

3.3 Competence

Whitehead (2010) discusses competence in terms of the capability or ability that individuals have to participate effectively in various sports and physical activities. Diagram 2 gives an overview of the number of nodes connected to the four dimensions of competence, that is movement vocabulary (B1), movement capacities (B2), movement patterns (B3) and particular activity (B4). The columns in different colors represent the younger boys (YB) and girls (YG) as well as the older boys (OB) and girls (OG).
As can be seen in diagram 2 there were no markings at all in the first two subcategories (B1, B2). Since these two dimensions concern the basic motor skills usually connected to early ages in the physical development, it was quite natural that young peoples in their teens did not talk about such issues. In total, 48 markings were noted in this main category.

In “Movement patterns” (B3) there were rather few markings (n=17). The differences between the subgroups were small. Examples from the interview text that has been placed in this subcategory can be seen below.

Example A (younger girls in a focus group interview)

   Interviewer: Have you tried to hang in rings?

   Hate it (girl 1).

   You can’t manage to do it (girl 2)

   Interviewer: Do you have some comments about handball when you played handball?

   It was hard. You ran all the time and you had strength training. But that is probably good but I didn’t like it (girl 1).

   Interviewer: Would you like to start in a team?

   Perhaps but I am perhaps too slow (girl 3).

Example B (older girl)

   Interviewer: What is your comment on the swimmer (looking at a picture)?

   I can’t swim.
Interviewer: You can’t swim?

No, I have tried for a long time, but I just can’t swim.

In all the quotations in this category (B3) the conversation was centered on discussions about the difficulties of how to master different types of sports and physical activities. The low number of quotations might mirror an uncertainty to think and verbalize such matters.

The fourth dimension “Particular activity” (B4) was the most “advanced” subcategory, which included contextually designed patterns that were called for in particular activity settings. A rather high number (n=31) of nodes have been classified within this class. However, the nodes placed there were very short sentences that mostly consisted of mentioning a specific sport or activity that the pupils have tried in the past and sometimes a comment if they liked it or not, if it was easy or difficult to do. The extract below was a typical example.

Example A (younger girls in a focus groups interview)

Interviewer: How was it to play handball?
It was funny but I didn’t like it very much (girl 1).

Interviewer: Why?
I don’t know, I felt, I wasn’t good at it and I don’t think it was something that I wanted to be good at (girl 1).

Interviewer: How do you like high jump?
Bad (girl 2).

We do it sometimes in school (girl 3).

Interviewer: How do you like it?
Mm (girl 2).

Interviewer: Is it bad?
Mm (girl 4).

In line with earlier results reported in connection with the Motivation category, the findings in this section (Competence) support the picture of the group studied; a purposive sample of young people with low or no involvement in sports and physical activities. Therefore it was no surprise that a vast majority of the informants have difficulties to make qualified reflections in this category.
3.4 The environment

Whitehead (2010) mentions environment utilizing an “everyday setting” dimension and a “structured physical activity setting” dimension (e.g. formal sports). Furthermore, she approaches the two dimensions in terms of reading and responding, that is the individual recognizes attributes in the environment and responds trying to realize certain behaviors.

Diagram 3 highlights the number of nodes per group connected to pupils’ quotes about the environment (C1: reading everyday settings; C2: responding to everyday settings; C3: reading structured PA settings; C4: responding to structured PA settings).

As diagram 3 shows the first two dimensions (C1, C2), “Reading and responding to everyday settings” have the highest frequency of nodes (n=72; n=53)) and specially older girls have expressed content from the interviews that has been classified in these subcategories. There were much less quotations placed in the two other dimensions, which were expected since these dimensions require experiences of sport activities. Typical quotes from the first two categories will be given below.

Example A (older girl)

Interviewer: Okay, are there any more leisure establishments or meeting places?

Eh yes, there are many at (a name of a place), which is situated a bit further up here (looking at a local map) but I never use to go there.

Interviewer: Why not?

Yes, I don’t know. I don’t like to be there…it happens so many things there so I try to avoid these places (the informant means that there is a risk of being assaulted).
Interviewer: That hall (the name of an indoor hall) what kind of hall is it?

Eh, it is such a, they have just built I think... and a lot of young people come so there they could play football and basket and gym activities.

Example B (younger boys in a focus group interview)

Interviewer: So you live close so you can walk, although boy 14, takes the tram. Eh, other leisure establishments as leisure house or football ground or?

Mm, (a name)(boy 1).

(a name)(boy 2).

Interviewer: What is that?

It’s like a football ground (boy 2).

Interviewer: Mm, and p 12 then. Where do use to be, at the football ground?

I sit at home all the time (laughs)...but it depends on the seasons, in winter like I sit at home but in the summer I go out cycling (boy 3).

Example C (older girl and older boy)

Interviewer: What did you do there?

Like, eh, I don’t actually know, we use to go to the dance hall...or like play football or no when exchange students were here it was funny. Then all played football and so.

Interviewer: Do you go there now?

Ah, I use to but not any longer, although now and then I go there (the girl).

Interviewer: Okay, what do you mean with problems at the square (asking a boy)?

There are the people who know us...they will say that we sit and do nothing. No, we don’t use to be there, we use to go up to (name of a hill and a sports ground). We sit there and talk and get Cola and drink.

Interviewer: (later in the interview) Just because it is funny to cycle around?

Ah.

Interviewer: Even if it’s cold?

I use to have cloths and a cap...it’s not cold.

Interviewer: Do you run?
Ah, I do. Twice per week.

There were many similar quotes where the pupils could identify places for physical activities and could more or less clearly state what they did there. But at the same time some individuals were very vague and tottered between different answers. This uncertainty probably mirrored their lack of experience and knowledge.

In the last two dimensions (C3, C4) concerning “Reading and responding to structured physical activity” very few quotes were found. The first case illustrates how one informant describes how some of her friends train at gyms.

Example A (older girl)

Interviewer: Is it someone you know that train a lot?

Eh, yes my or it is many who train at gyms. But some practice football, but most of them I know go to gyms.

Interviewer Eh,: Where do they go?

Some go to (a name) or they go to (a name)...

The other example is from a focus groups interview.

Example B (younger boys in a focus groups interview)

Interviewer: What are you training?

Football.

Interviewer: How often do you train?

Three times per week.

The few examples found in these subcategories illustrated very well that this sample of young people in interviews very seldom mentioned structured physical activities. It seems that it was not natural for them to give that kind of examples even when the questions were formulated in a way that easily could have elicited such answers. It is, however, hard for the informants to express situations that suit these dimensions when they are not familiar with them.

3.5 Sense of the self

Issues of the sense of the self incorporate aspects of “More enjoyment than competition” (D1) and positive experiences (D2) in sports and physical activity as well as the effectiveness of the involvement (D3) and the participation of the individual as a person and not as a mechanical object (D4).
Diagram 4 shows the number of nodes related to the four aspects of the sense of the self as proposed by Whitehead. Furthermore, issues of gender have been included in this domain (D5).

Diagram 4. Sense of the self. Nodes/group

According to diagram 4 there were not many examples in the interview material that was dealing with the main category “Sense of the self” (only one marking in D3 and none in D4). One aspect that was included in this domain was the subcategory “More enjoyment than competition” (D1) and in Whitehead’s theoretical reasoning a more physical literate person should be more inclined to discuss physical activity/sports in terms of “Enjoyment rather than competition”. An example of this is shown below when the interviewer and the informant spoke about some of the pictures of sporting people shown to the pupils.

Example A (older girl)

*Interviewer: When you look at these competing young people, how do you think they feel?*

*It depends. When you are so young, it’s often the parents who push the children and say to them to do this and that. And I think that many children who are pushed in that way are very unhappy. And the parents do not understand it. But, of course, there are children who like it very much. So I don’t know.*

*Interviewer: Is it something similar that you remember when you played tennis as a child?*

*No, it was mostly good for I played for fun. I was not so serious and didn’t want to be professional. So it was for fun and I took it easily. And my parents, when they understood that I didn’t want to be something, they didn’t say anything and took it easy. It didn’t play any role for them so I don’t know.*
The quote above was the best example in the material where a pupil could express oneself in this varied way about the subtle (and much debated) relation between enjoyment and competition in physical and sporting activities.

Most quotations in this main category were found in “Positive experiences” (D2) and some of them are exemplified below.

Example A (girls and boys in focus groups interviews)

*Interviewer: Which ones do you think are funny (looking at pictures)?*

*Hm (wondering)...this is very funny (pointing at table tennis)(girl1)*

*Interviewer: are there any other sports that you miss in these pictures?*

*Mm, floor ball, I like that (girl 1).*

*I also like gymnastics, I took part when I was a child (girl 1)*

*I have tried ice-skating too (girl 1)*

*Interviewer: What did you think when you tried them before?*

*These three are funny (pointing at tennis, cycling, and swimming)(boy 1)*

*Cycling, climbing and basket (boy 2).*

*Interviewer: Why do you point at them?*

*Because I do them (boy 2).*

Since many of the pupils have (or mostly have had) experiences of some kind of club sports or other sports activities there were examples of positive experiences in sport settings (21 markings), but compared to the subcategory “Damaged motivation” (91 markings), examined before, the difference was very evident. In this special sample of young people the informants expressed themselves more than four times more often about situations, where they have had negative experiences (“Damaged motivation”) of sports and/or physical activities.

With one exception there were no examples of quotes in D3 and D4, categories that called for advanced knowledge and/or an ability of abstract reasoning. One cannot expect this group to have such a level of physical literacy in Whitehead’s meaning.

It was not common (14 markings) that “gender issues” were mentioned during the interviews, but when they appeared they were centered on two themes: body shape (muscles) and which physical activities that were suited for boys and girls. The first example concerns “muscles”.

Example A (younger boys and girls in focus groups interviews)
It is nauseating on girls (a boy pointing at a picture on a female body builder)

Interviewer: With muscles?

Ah.

Interviewer: But not on boys?

No.

Interviewer: On boys, why?

It suits boys more. (another boy)

Interviewer: Why?

Because girls become ugly.

Interviewer: How should girls look like?

Muscular and thin (a third boy).

Boys should have muscles (girl 1) (the other girls laughing a bit)

Interviewer: Why?

It’s nice (girl 1).

It’s nice, they should be strong (girl 2)

Interviewer: Because of...?

I don’t know.

So they could protect themselves.

Interviewer: Girls then and muscles?

No, I don’t think that girls should have muscles

Interviewer: Why not?

Yes, a little, stomach muscles (girl 3).

The boys and girls who were represented in this category by their voices (quotes) seemed to share a very traditional view on how female and male bodies should look like. Earlier research (Fagrell, 2000) has shown that children at an early age usually have been socialized into traditional sex roles in relation to body and sports and these results tend to get support in this study.
The other theme that was visible in the text categorized as “gender issues” was which kinds of sports activities that were experienced as suitable for boys and girls. Below are some examples.

Example A (older girl)

_Interviewer: Is it so it uses to be in the PE-lessons?_

_Yes, sometimes. It depends what you should do…the boys like very much to play football. And we, the girls, use to be for ourselves. We use to do like steeplechase or like training…but when we should be together to play rounders or so the boys always shout “noo, not together”. _

Example B (young boys in a focus group interview)

_When you are a little child and play handball with your friends, but then they left and it became dull because I was the only boy, so I went to football, it was like group pressure or what should I name it (boy 1)._  

_It is the same for me. If I go to badminton it is no problem if I like it, but for example gymnastics, I don’t know but it feels like “girlish” or they laugh at me or so (boy 2)._  

There were few nodes/quotes in the “gender issue” dimension. This subcategory was not in Whitehead’s original conceptual scheme, but was added as an extra domain in the main category “Sense of the self”. The sex/gender identification ought to be an important component in the self-concept, even if it did not appear often spontaneously in the interview material in this study. The findings gave, however, strong indications that in this group of physically inactive young people, where a overwhelming majority (94%) was of foreign origin and most of them from outside Europe, have adopted traditional views of gendered bodies and sports activities. The idea of male hegemony in sports were not much clearly articulated in the material, but seemed to be an underlying line of thought in the minds of the informants.

### 3.6 Self expression and communication with others

Exercise and sport as a means of self-expression and communication with others might be the essence of physical activity as a social and cultural phenomenon. Diagram 5 depicts the number of nodes connected to issues of self-expression and communication with others (E1: Fluent self-expression; E2: perceptive & empathetic interaction; E3 sensitivity to; E4: awareness of).
It was obvious that almost nothing from the interviews were placed in the first subcategory (“Fluent self-expression”), but quotes belonging to the other dimensions were, relatively seen, much more common, especially among older girls. In E2 (“Perceptive and empathic interaction with others”) some examples will illustrate conversation that dealt with such matters.

Example A (younger boys in a focus group interview)

Interviewer: Is it some sport, which is not included in the pictures that you have tested?

Yes, football.

Interviewer: How was that?

It was funny, you play with your friends. You have known them since you was young, at least some of them.

Example B (older boy)

Interviewer: Did he help you with training schedules too?

Aa, he builds different schedules. So every time we go he tells me what to do.

Interviewer: Is he always with you?

Yes, we help each other, for example at bench press when I can`t lift it he pulls my weights when they go down to my breast.

The highest frequency of nodes has E3 (“Sensitivity to”), where quotations that mirror sensible reactions to others have been classified. According to Whitehead (2010) a literate person ought to express meanings about others that have an element of
sensitivity. Below are two examples dealing with how these informants looked upon their parents training.

Example A (younger girls in a focus group interview)

*She (her mother) sometimes gets some “kicks” to start training and so, but then it disappears after a while and then it comes back.*

*Interviewer: Okay, what does she do then?*

*She use to go to gym sometimes and when we lived in (a name of a town) we used to go like power walk like around a lake and we went around like so.*

Example B (younger boy in a focus group interview)

*Oh. What’s the name? My parents train because they have started with that now and they do it when they can...I think they do it every day when they have come home from work. But sometimes they are perhaps tired so they skip it but so on weekdays they use to go to the gym and practice and then in the weekends mum use to be at home and do the house and sometimes if she wants to hang with us we go for a swim or so.*

There were also some cases of E4 (n=14), a subcategory that was called “Awareness of”. One example will illustrate how a boy became aware of the advantage with gym training.

*Interviewer: How did you feel when they said you should start training?*

*I became a bit shocked because usually they say “do as you want” but this time they said we should start with gym training to be in better shape.*

*Interviewer: Why do you think they said like this?*

*They surely thought...I should burn more calories and loss weight...and maybe start to do sports instead of sitting at home and rest...I think it’s better to train a little, I have got a little better condition.*

As expected rather few of the informants were able to express meanings that could be classified in the main dimension of “Self-expression and interaction”. Social friendly relation, rather often in a family context, and helping behavior were emphasized. In some cases it could be seen that pupils in the interaction with others have been aware of health related benefits of physical activities.

3.7 Knowledge and understanding

Motivation, competence and the environment are crucial factors to start and maintain a physically active lifestyle according to Whitehead (2010). These three factors have an impact on the sense of the self, the self-expression and communication with others as well as on the knowledge and understanding. Quotes related to the sense of the self as
well as self-expression and communication with others were few. However, this is not the case to the same degree in matters of knowledge and understanding.

Diagram 6 gives an overview of the number of nodes related to issues of knowledge and communication per group (F1: Identify & articulate PA; F2: Identify & articulate their own engagement; F3 Propositional knowledge; F4 Involving language; F5 Understanding of the benefits towards life quality).

As indicated in diagram 6 no answers were found in F4 (“Involving language”). Of the other subcategories F2 (“Identify and articulate their own engagement”) received most nodes/quotes (n=43), while the others had a considerably lower amount. There were several examples of how young people tried to describe their engagement in sports/physical activities.

Example A (older girl)

*Interviewer: Do you like to go training?*

*Yes, I use to go to gym now and then, but only sometimes and not very often.*

*Interviewer: When do you do it?*

*When I have time, like. If it comes spontaneously “should we go and gym”. But usually it is to train my back. And that happens once per two months, not so very often, in fact very seldom.*

It is evident that this girl tried hard to describe her PA habits but felt a bit uncertain until she gave a more accurate answer.

Example B (younger girl in a focus group interview)

*Interviewer: Do you think that you can be as active (looking at a photo of an athlete)?*
No (hesitating), well, then I have to find something very interesting because I am not so...

Interviewer: You should only engage yourself if you find something funny?

Eh, I would better like to draw or something...and then it’s a little like this, I’m rather lazy too but otherwise it is nothing that is a real barrier.

Example C (older girl)

Interviewer: Why not any longer (about playing football)?

I don’t feel for it. Now I think only of studying and football is not something that I will keep on doing in the future. My brothers I know love to play football and one of them can perhaps be something big in the future...but I feel it’s fun to play now but in the future it is not something I will go on with.

In the examples above, as well as in the total material in this subcategory, it was typical that the informants had some difficulties to decide at what level their engagement in PA/sports was. Initially they often gave a rough answer, which in a dialogue with the interviewer, became somewhat more accurate (and usually at a lower level of engagement) in the end of the interview sequence.

Did the informants have the ability to discuss PA/sports matter in a logical way in terms of cause and effect or in Whitehead’s words had “Propositional knowledge”? Rather few examples were found and older girls were overrepresented in this sub dimension. Some illustrations will be shown below.

Example A (older girl)

Interviewer: Do you train yourself?

Yes, because I have back problems so I must strengthen the muscles.

Example B (young boys in a focus group interview)

In a discussion about strength training the following dialogue took place.

It is not good to do it when you are young, you don’t grow (boy 1).

Or the growth stops (boy 2).

You have better do some sport instead, no strength training in this age, maybe later (boy 3).

Example C (older boy)

Interviewer: Is it because you will live better you should train?
Ah, I will have better initiative to train instead of starting to smoke and so because I have had problems with my lungs.

A close related dimension to the former one was “Understanding the benefits towards life quality” (F5). Again a restricted number of nodes (n=13) were coded into this subcategory. The school subject Physical education (PE) in Sweden is named “Sport and health” and an overarching goal is to teach about the relationship between PA/sport and different health aspects. In spite of that few pupils in this study, where one inclusion criterion was low interest in PE, talked about health and quality of life issues in the interviews. Some of the few examples will be seen below.

Example A (boys in a focus group interview)

Interviewer: What`s good about training?

It`s important, you will become lazy, you will become fat...it`s important for your muscles, it`s not good to be lazy and such things (boy 1).

Interviewer: What do your parents say about physical activity?

It`s important, it`s good for the body (boy 2).

It`s good for your health. It`s good to be outdoors, you feel good inside you (boy 3).

It`s good for the body so you don`t get ill.

Example B (older girl)

Interviewer: What should you like that (looking at photos)

(Looking at photos and seems to feel uncomfortable) ...Yes I think that me too should think so, you should feel better, because you will get better condition and exercise and health and so. But I shouldn`t, I don`t know.

Example C (older boy)

Interviewer: What do you think, is it funny?

Ah. It is funny...it`s better to built up your health than for example those who smoke and lose condition and everything, it`s better to, it`s much more useful to live the training life.

The category “Knowledge and understanding” was in terms of number of nodes the third biggest of Whitehead`s six dimensions. In spite of that one can, from a qualitative perspective, observe that the answers/quotes gave an impression of a low level of knowledge and understanding in the sports/PA area. This finding was not surprising and goes hand in hand with the previous results in this investigation.
3.8 An overview of the quantitative results

Diagram 7 gives an overview of the aggregated number of nodes within each domain (A: Motivation; B: Competence; C: Environment; D: Sense of the self; E: Self-expression & interaction; F: Knowledge and understanding).

As can be observed in the table, the numbers of nodes related to motivation and environment were more frequent than to the other domains. Furthermore, it could be seen that pupils did not articulate issues related to their own competence. Additionally, few quotes were related to matters of self-expression and communication with others. In five of the six main categories there was a tendency that the older girls had talked more than the other subgroups. This trend could perhaps be explained by that girls mature earlier than boys and that they in general have a higher verbal competency.

In order to gain a better overview of the relative importance of such issues for the different groups, diagram 8 shows the relative text length (in percentage) of nodes.

According to diagram 8 the same tendency can be seen even clearer. The older girls - with the exception of category B "Competence" - spoke to a much higher degree with
longer sentences than the other three subgroups in all the other main dimensions. Were there, overall, a gender difference in the number of quotes/nodes expressed in the interviews? In diagram 9 the results are presented.

It was evident that girls were more talkative than boys in all the main dimensions. The differences between the sexes were so distinct that the fact that there were five more girls than boys in the sample cannot explain this phenomenon. Independent of the subject matter that was talked about during the interviews girls and particularly older girls spoke more often and in longer sentences about various aspects of sports and physical (in)activity. Irrespective of sex, was there a difference between the younger and older pupils? In diagram 10 the results are shown.
As was discussed in section 3.1 the younger ones took part in focus groups interviews and were many more than the older pupils. It is therefore more difficult to say something about differences. However, in spite of being fewer the older had a much higher frequency than the younger in half of the main categories (C, E, F) and only slightly fewer nodes in the remaining three domains (B, C, D). These observations indicated that the older age group had a tendency to talk more often than the younger group. This finding was not a surprise since one can expect that older pupils had a higher capacity to express oneself in an interview situation. It may also be easier to talk in an individual interview than in a focus group interview.
4. Discussion

According to a very recent review of the research literature of young peoples’ physical activity patterns (Armstrong, 2012), the conclusion was that…

...most young peoples are fit but not active. Both HPA (habitual physical activity) and AF (aerobic fitness) have stabilized over the last two decades but the low levels of young people’s HPA and the marked decline over the last 35 years in maximal aerobic performance which involves transporting body mass remain major issues in the promotion of youth health and well-being. (p 138)

Similar conclusions could also be found in Parikksson (2012); the literature review made in the Swedish part of this European study. Questions like these have for a long time constantly been discussed widely by both researchers and politicians and a lot of efforts have been made to reduce the level of inactivity among young people. Most attempts of promoting physical activity have been of a general character aiming to raise the PA levels for all young people using rather traditional methods as campaigns and the possibilities for sport clubs to apply for money to start projects of different kinds. The successes of such campaigns and projects have been limited and the effects (if there were any) have often lasted shortly. The experiences from such efforts have clearly shown that it is a very complex and difficult task to change PA and other activities/habits.

Another lesson learned is that the message to be delivered should be better adapted to the target group. A problem is, however, that the knowledge of the target group could be inadequate. Such reasoning laid behind the start of this research project, where a common aim was to try to increase the knowledge of how physically inactive young people had experienced PA and sports and how they behaved and thought about such phenomena.

To recapitulate: the purpose of this study was to describe the lifestyles of young people in Sweden with a particular interest in physical activity patterns in physically inactive groups. The theoretical framework used was Whitehead’s (2010) conceptual scheme of physical literacy and inspired by her terminology the research questions were formulated as follows:

1. To describe the lifestyles of physically inactive groups of young people in terms of physical literacy, that is motivation, competence, environment, sense of the self, expression and interaction as well as knowledge and understanding.

2. To explore gender and age specific patterns.

3. Try to find facilitators in the environment that might increase the possibilities for physical activity/physical literacy.
4.1 Some theoretical and methodological reflections

The choice of Whitehead’s (2010) conceptual model as a theoretical foundation for the research project was not without problems for the empirical analyses. Her conceptual scheme was not created to be a category system for sorting out empirical materials, but the intention (with inspiration from the general literacy concept) was – as we see it - more of an attempt to shape a holistic and integrative approach based on phenomenological ideas to the broad area of motor learning, motor development, physical education, physical activity and sport. Another source of inspiration for her conceptual work has obviously been aspects of motivational theory (which has not been documented in detail in her text) and (physical)self- theory (Fox, 2010).

With such an holistic intention in mind, it was not strange to observe that the conceptual elements had some difficulties to meet the two most important criteria of a “good” category system: (1) that the categories should be able to include all relevant information in a systematic way in the area studied and (2) that the categories should be mutually exclusive (a category unit could only be placed in one and no other category). To reach the second aim it is important that the categories are not overlapping each other and that they are well defined.

When categorizing the interview data into the program Nvivo 10 with the help of our categories, we soon found out that there was relevant material that did not suit to any of the categories in the conceptual scheme. Therefore, in some cases, additional categories had to be constructed. These cases have been reported in chapter 3. One example is the subcategory (A6) “Screen-based inactivity”. It was also evident that the categories in many cases were overlapping. Many units of information in the interview material were possible to place in a meaningful way in more than one category. That was done in rather many cases (about 10-15%) of the material because it was impossible to decide that they belonged to only one category, when, in reality, they also suited as well in another category. In this report, however, the quotes used as examples of the different categories have not been applied as illustrations in more than one category. In spite of the discussed methodological limitations of the theoretical framework we believe that this approach has been fruitful and has forced us to think in partly new ways. That does not, however, mean that categories/dimensions can not be further developed.

4.2 Main results in relations to purpose and research questions

The main purpose of the study was to describe the lifestyles of young people with a special interest in physically inactive groups in terms of physical literacy and its main dimensions and subcategories. There was also an interest to see if there were differences between the sexes and between younger (12-14 years of age) and older (15-16 years of age) pupils. The results have been presented both in a qualitative (quotes from informants) and a quantitative (descriptive statistics) way.

One simplified way of looking at the conceptual model could be to regard the first three physical literacy dimensions (A. Motivation, B. Competence and C. Environment) as
influencing the other three dimensions (D. Sense of the self, E. Self-expression and interaction and F. Knowledge and understanding) in positive or negative ways. If there are a large amount of verbal expressions (nodes) in the A, B and C dimensions they would probably affect the D, E and F dimensions in a positive way, while the contrary is likely to happen if there are few expressions found in the A, B and C dimensions.

The empirical results showed that the number of nodes which were related to motivation and environment were more frequent than to the other domains. This somewhat unexpected finding could probably be explained by the fact that the sample unlucky contained a number of pupils that were involved in PA/sports. A closer look at the content of the interview quotes revealed, however, that this group of young people to a very high degree stressed the social dimensions of the activities as well as the possibilities to initiate and establish social relations via PA/sport activities. They also emphasized the cooperative potentials of sports as well as the recreational aspects. The competitive elements of PA/sports were, on the other hand, not often mentioned by the informants.

A typical characteristic of physical illiteracy in this group was that there were very few indications of a true will to try something new (A4). The curiosity level in the physical sphere of life seemed to be very low. It looked like this lack of motivation partly could be explained by earlier experiences in sports and other organized activities. A sign of that was the very high allocation of nodes (n=91) in the subcategory “Damaged motivation” (A5). The quotes illustrated a wide range of ill treatment from the side of organized sports to these young people, who had got negative sport related feelings and a tendency to avoid similar situations that gave such associations. In line with these results were also that in this group of mostly inactive young people many of them had tried one or more sports for rather short periods of time. The identified pattern in this respect was that they had left sport(s) several times, sometimes going in and out with short intervals but then staying outside organized sports. Another quality of sport situations that was called attention to was the fear of showing/exposing oneself in front of others both in school PE and in sport settings.

Another much discussed topic considers the role of media consumption in terms of TV viewing, computer games, social media etc. and its impact on PA/sport activities. There are no univocal findings (Patriksson & Stråhlman, 2006) of the relationships between media consumption and PA. The results from this study, however, indicated (where no possibilities to compare with more physically active youngsters existed) that screen-based inactivity played a very big role in their life. Some of them were more or less addicted to computer games and looking at movies via different media and in spite of an awareness of this they seemed to be unmotivated or had big problems to change their habits.

The gender issue was not much addressed in the interview material by the informants. The few nodes/quotes identified gave, however, strong indications that this group of inactive young people, where a vast majority had a foreign background and most of
them came from countries outside of Europe, had incorporated traditional values of
gendered bodies in relation to what was desirable or not in the area of PA and sport.
The informants also seemed to have, not very clearly articulated, thoughts that mirrored
an idea of male hegemony in sports. In general – across dimension/categories – it was
evident that a vast majority of the sample had widespread difficulties to make qualified
reflections about PA/sports and exhibited a low level of knowledge and understanding
of issues in this area. In short; they were physically illiterate in all aspects of the
concept.

Were there any gender differences and/or age differences? As has been pointed out
earlier (see 3.1) there were some difficulties to make “straight forward” comparisons
between the subgroups because of different sizes, particularly among the two age-
groups. Generally there were few distinct differences. Among the small amount of
significant differences could be mentioned that in the largest dimension (in terms of
numbers) “Damaged motivation” there were about double as many text fragments
(nodes) expressed by girls compared to boys. Within each sex there were different
tendencies: younger boys had more often pronounced negative experiences than older
ones, whilst the opposite was the case among the girls. Another finding was that boys
referred to a higher extent to “Screen-based inactivity” than girls when talking about
reasons behind their low physical activity. In the same area it could be observed that the
younger adolescents were more inclined than the older ones to mention their strong
dedication to look at TV and play computer games etc. Another observation that was
made concerned how much the four different subgroups talked during the interviews. In
five of the six main categories there was a tendency that the older girl spoke more and
in longer sentences than the other three subgroups. These trends were explained by the
fact that girls tend to mature earlier than boys and that they in average have a higher
verbal capacity. There was also an age difference. – independently of gender – that
manifested itself in more spoken communication among the older pupils. This finding
could probably also be explained by maturity factors. An additional explanation could
be that it was easier to express oneself in an individual interview situation than in a
focus group interview.

The third research question addressed if it was possible to find facilitators in the
environment that might increase the possibilities for physical activity/physical literacy.
Many straight forward answers by the informants (almost all with some kind of foreign
background) indicated that there were very few or no formal barriers at all in their
environment that stopped them from to be active in a sport club or to be physically
active. There were sport clubs, sports arenas and recreation places in the vicinity.
Economical barriers were neither mentioned. The problems related to low physical
literacy seems to be much more complex and subtle (“lying under the surface”) and
have strong connections to the sub-cultural levels, where values, traditions and cultural
identities (sometimes multiple and contrasting) play significant roles in how sports and
physical activity are experienced and valued. A key concept is concerned participation
or empowerment: to have a feeling of a possibility to influence the everyday activities
you are involved in and a feeling of belongingness to the group are essential. To reach such goals it might be necessary for this group of inactive young people, especially for girls with a muslim background, to challenge the culture of the family and try to create an identity of their own (Walseth, 2006; Lundvall & Safizadeh, 2012). Important strategies in such actions could be to give possibilities for the parents to the potential members/participants to get familiar with the activities and ask for their views on training regimes etc.

An important goal with this research project has been to reduce the knowledge gap about physical illiteracy in inactive young people with a qualitative methodology. We know rather well through previous quantitative research how many they are and who they are, but have a very limited knowledge of how they think, feel and value aspects of sport and physical activity. The most valuable contributions from this research were (1) the methodological experiences of how to tackle the problems of such an approach and (2) a first insight into these young peoples’ lived experiences – a little bit of an inside perspective – that could be an important platform for further actions in this important area: to get this group of young people to become more physically literate and promote a healthier lifestyle. To reach such goals there is a great need for tailor-made solutions for this special group. The results from this study can be important pieces of puzzle in such actions.

4.3 Concluding remarks

A general impression was that a vast majority of the informants mostly had a sedentary lifestyle dominated by sitting activities at home like TV-viewing and computer usage of different kinds. This trend can also be seen in many other studies (see Rey-Lopez et al, 2011). One reason for this development could be that nowadays there are substantially more leisure activities than before that can be executed in sedentary positions. Computers and phones have made it easier to keep contact with friends without moving oneself physically. More TV-and computer games have also been more competitive and can replace “real” game and sport activities.

Another reason for changing behavior patterns is that children and youths now have different social relations to their families than before. A very common way to be together in many families is to look at TV (often football matches) and movies. Such a sedentary behavior, in combination with different kinds of fast food, will thus be reinforced among our informants in their close family environment. Still most pupils say that their parents think that sport and physical activity is good and useful, but on the other hand very few of the parents are physically active themselves.

Much research has documented that physical (in)activity is due to a complex interplay between a lot of factors where cultural background and social milieu are of great importance (Larsson, 2008). Lifestyles habits are not, in the first hand, a matter of a total free choice (which many people believe), but highly dependent upon social circumstances (environmental factors), which include the status hierarchy between
different activities in the social milieu where the specific individual is a part. In this study many youngsters, particularly boys, expressed that they "play football". It is clearly seen in the interview material that it was regarded as important to play football and it gave also status to "hang around" the football field. It was, however, evident that the concept play football included more than the playing itself for many of the informants. It was for many, especially girls, a matter of meeting at the football field and talk and associate with each other.

Another observation was that very few of the informants were active in a sport club (according to the inclusion criteria nobody should be a member, see the discussions earlier in the report) at the time for the interviews. However, it is worth noticing that the majority of the pupils in this study had tested to be active in one or more sports clubs, but has left organized sport often after a short time. Very large investments in terms of governmental money via the “Handshake” and the “Sports lift” have recently been put into organized youth sport in Sweden to recruit more and new young members from segments of society where sport is not always a natural element of young peoples’ lifestyles. Evaluations of the “Handshake” (2002-2006) and the “Sports lift” (2007-2011) showed that it was difficult to reach these target groups (Patriksson, Eriksson, Stråhlman & Kristen, 2007; Patriksson, Stråhlman & Eriksson, 2012).

The findings from this study indicated that this form of sport (club sport) was not in the taste of most of the informants. Instead they chose other activities like home-based sedentary activities and/or sometimes football and other sports/physical activities in unorganized forms. Several of the pupils' expressions told clearly what they thought about organized sports: "Too much training" and "Think self someone who says do so and jump now". Many of the young people in this study came from cultures where organized sport is/was rather rare. They did not easily fit into the organized sport culture, but were more used to their home countries culture with spontaneous and unorganized forms of sport/physical activity, where the participants had a big influence on where, when and how the activities should be done. To get a responsibility of one's own and to feel freedom when the activities are performed seems to be experienced as rewarding and probably a central concept to get this group of inactive more physically literate.
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