SWEDISH JOURNAL OF SPORT RESEARCH

Volume 1. 2012

SVEBI
SWEDISH ASSOCIATION
FOR BEHAVIOURAL
AND SOCIAL
RESEARCH IN SPORT

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Foreword

Representing the Swedish Association for Behavioural and Social Research in Sport, the ***Swedish Journal of Sport Research*** publishes original articles on educational, historical, pedagogical, philosophical, psychological and sociological aspects of sport.

This is the first volume of the peer-reviewed Swedish Journal of Sport Research, which is completely published in English. The aim of the journal is to be an international forum for sport research and, therefore, it is a pleasure to note that two articles are the contribution of international researchers. Furthermore, the reviewers were mainly international researchers in the area of the topics covered.

I would like to thank the authors for choosing the Swedish Journal of Sport Research for publication of their studies. I would also like to thank all reviewers for their ambitious work in reviewing the various phases of the manuscripts until the stage of acceptance/rejection to be published as articles.

Erwin Apitzsch

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Good sport environments:

A study of collective fundamental values and their importance for activity principles in Swedish club sport

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Abstract

This study answers the call made by the Swedish government, the Swedish Sports Confederation (RF) and Swedish local authorities for research on success factors in Swedish club sport. By using RF´s success concept and sport scholars critique in reverse as points of departure for our study we selected two "successful" sports clubs for a study of the constitution of good sport environments. Our theoretical starting point was that an organisation's collective fundamental values contribute to shaping both its goals and its practice – and in extension to its potential to constitute a good sport environment. The results, which are based on eight qualitative interviews with key individuals, show how the clubs work with society-related dilemmas and sport-specific problems. By analysing elements in the club environments which have promoted this work we have been able to get an insight into the values on which these environments rest and their importance for building good sport environments.

Keywords: successful sport clubs, expansion, decentralisation

Introduction

Swedish sport research within social sciences is sometimes blamed for focusing too much on problems. One conspicuous example is the debate following on the recent report on state support to club sport (Riksidrottsförbundet, 2008a; 2008b; 2008c). Also municipality representatives have called for research that does not solely elucidate the shortcomings of club sport but also focuses on good examples and success factors (Sjöblom, 2011). The government has too in its 2012 mission to the Centre for Sport Research called for research on sport environments which are characterised by good sports activities (Kulturdepartementet, 2011). Hence, the aim of this article is to study sports clubs that are appreciated both by the sport movement and by the surrounding community and to analyse the underlying reasons for this.

Current state of research and problem approach

Societally oriented sport research indicates that for a couple of decades sport has undergone a period of transition, where pluralisation-, market- and democratisation processes working in parallel have set their stamp on the field of sport – making it increasingly multifaceted but also more specialised and, consequently, contradictory (Bairner, 2010; Bergsgard & Norberg, 2010; Fahlén & Sjöblom, 2008). Parallel with the professionalisation and commercialisation of the sport movement a new sport policy has taken shape whose goal is to listen more to citizen needs and allocate resources to previously neglected groups (Karp, Eliasson, Fahlén, Löfgren, & Wickman, 2012; Sjöblom, 2007).

This is the societal sport context in researcher perspective. The actual sport context involves the ambition of sport to foster to democratic forms of social contact built on tolerance and cooperation and also sport's own competitive logic of fostering to competition and elimination. Ranking and selection take place simultaneously with the encouragement to athletes to help each other and

strive towards the same goals (Hertting, 2007; Peterson, 2002; Börjeson & von Essen, 2007). The chief impression obtained from research is that competition and elimination dominates already from childhood in many sports clubs and that the training and competition debut has crept further down the ages (Andreasson, 2007; Carlsson & Fransson, 2006; Fundberg, 2005; Riksidrottsförbundet, 2005; SOU, 2008). Besides, one out of five young athletes experiences insufficiency and pressure emanating from their parents, and the number of young people who leave sporting activities in the upper teens exceeds 65 per cent in some sports (Augustsson & Patriksson, 2007; Eliasson, 2009; Thedin Jakobsson & Engström, 2008; Wagnsson & Patriksson, 2007). Nor does everyone feel as welcome to sport as wished for in the "sport for all" goal set up by the State and the Swedish Sports Confederation (RF) (Engström, Norberg, & Åkesson, 2007; Hertting, 2010; Wickman, 2011). In addition the recruitment of leaders remains one of the major problems of the sport movement (Meckbach & Larsson, 2007). It is the women, especially, who are kept out of leading positions (Fundberg, 2003; Olofsson, 2009; Peterson, 2000; Ström & Lindgren, 2005).

How is it possible for a sports club to work successfully at solving these societally related dilemmas and sport-specific problems – and what is there in the club environment that affects the work? *What sport wants*, the sport movement's joint policy, says that all activities should be open to everyone and that they should have a built-in ambition to continually improve and develop (Riksidrottsförbundet, 2009). These words about openness and positive development will be used in this article as a starting point for the success concept. A second starting point is taken from the sport-specific problems and societal dilemmas that have been highlighted by research and which refer in several ways to these very ideals, or to their shortcomings. Thus, critical sport research implicitly contributes to researchers' definition of success, which seems to broadly agree with that of the sport movement itself.

How should success be studied? One conclusion we have drawn from earlier analyses of sports club environment and activities, which still is a relatively new and small research area in Sweden, is that there exist many points of comparison regarding the relation between resource creation, resource distribution and resource consumption, on the one hand, and activity focus, attitudes and ambitions, on the other – i.e. how club structures manifest joint values (Fahlén, 2006; Fahlén & Aggestål, 2011; Sjöblom, 2006; Sjöblom & Fahlén, 2010; Stenling & Fahlén, 2009). Another conclusion we draw is that there seem to be differences between sports clubs based in major municipality centres and those based in surrounding rural districts. In rural districts even the general non-sporting public is committed to the sports club and participates in its activities. The club is better at "networking" and "socialising", cooperating with school, childcare and church and at involving local industries and the general public. On the other hand, in municipality centres the sports club generally have a bigger member base as well as a financial base (Fahlén & Sjöblom, 2008; Sjöblom, 2006).

On the basis of these conclusions and the problems sketched prior to these we have for this study selected two "successful" sports clubs, one in a city and one in a village.

Collective meaning creation – analytical framework and methodology

Our analytical starting point is that the organisation's collective fundamental values contribute to shaping both its goals and its practice. This argument builds on the assumption that organisations can be described in terms of structural elements and organisational processes, which together form patterns or contexts (Miller & Friesen, 1980a; 1980b). These are the result of collective ideas about what the actual organisation should do, how it should be done, and how the

results should be assessed. The organisational patterns are created to implement the ideas – and function simultaneously as to reinforce these patterns. The shaping of structural elements and organisational processes derives from what the organisation as a collective ascribes meaning to (Ranson, Hinings, & Greenwood, 1980). With a view to analysing collective meaning creation we focus on the organisational domain, its structural elements and organisational processes, its criteria of effectiveness and its contextual constraints (Greenwood & Hinings, 1988; Ranson, Hinings, & Greenwoods, 1980).

By studying the organisational domain, its aim and goals can be analysed. By studying the organisation's structural elements and organisational processes its way of arranging activities can be analysed. These elements and processes are operationalised via the concepts of specialisation, standardisation and centralisation. The specialisation concept analyses how an organisation distributes tasks and roles among individuals and groups. The standardisation concept describes how an organisation works with rules, guidelines and routines. The centralisation concept shows how power and authorisation are distributed. A study of an organisation's criteria of effectiveness makes it possible to assess the results of its activities, the point of time when it considers its own club successful and the way it gets about determining this. Finally, studying the organisation's contextual constraints enables the analysis of its way of adapting to the surrounding community.

The idea of the analysis frame described above is to give us an insight into the fundamental values permeating the organisation. If the sports club succeeds well, according to the RF and contemporary research definition of the concept of success, we might claim that the club's fundamental values and the practice created have formed what is the basis of the success – its good sport environment.

Study aim, selection and method

We have studied two sports clubs' fundamental values and their importance to the activities of the club. The aim was to examine to what extent and in what way the clubs live up to the success concept of sport movement and research, and to discuss how far this can be said to be connected with their fundamental values.

It may seem as a too tight delimitation to be able to generalise the results. However, our main goal was not to talk about Swedish sport clubs in general but to try to understand the underlying mechanisms of successful problem-solving in an increasingly demanding environment. Therefore, we selected two designated successful clubs for an in-depth study.

To achieve this aim we made three selections to establish our study objects, our information source and our interpretation model. We initially looked for sports clubs which had attracted attention by their successes. AC Springhill (the club name is feigned and revealing contextual information is omitted from the results for ethical purposes) is held up as a model by the local municipal management for creating harmony between elite and broad sport activities and has been given a price by RF for having Sweden's best coaches. Rawley FC (the club name is feigned and revealing contextual information is omitted from the results for ethical purposes) has achieved prominence in the local municipality for highlighting and evaluating fundamental value issues and has been awarded Svenska Spel's All Fair Price. Since more than these two clubs have received these awards and are appreciated by their respective local communities, our sampling was further guided by access (Shenton & Hayter, 2004).

The second selection concerned the method for gathering data. To be able to create a collected, coherent, yet nuanced picture of organisational domain,

structural elements and organisational processes, criteria of effectiveness, and contextual constraints we used a selection principle worked out by Porter and Lawler (1965) and Pugh et al. (1968) which had been adapted to a non-profit association context by Fahlén (2005a). The classification principle, aiming at creating collective accounts from individual ones by interviewing respondents from different areas in the club and on different positions, includes the hierarchic level (chairperson, operational leader, leader of activities), the task type (operative or administrative) and the type of engagement (paid or volunteer). On the basis of these three principles we interviewed one person per category and club in order to be able to create one collective meaning-creating system including accounts from all parts of the organisation, i.e. two volunteer board members with administrative tasks active on the top level in the hierarchy, two paid activity leaders with administrative tasks active on the second highest hierarchic level, two paid coaches with operative tasks active on the second lowest hierarchic level, and two volunteer youth leaders with operative tasks active on the lowest level in the hierarchy. The main purpose of this procedure was to minimise the risk of taking one person's (e.g. a chairperson's) account as the sole pretext for the collective meaning-creating system, but instead balancing several individual accounts based on different organisational experiences. In the categories where there was more than one person to choose from, our selection was randomised. Informed consent was given by all respondents prior to the data collection. The respondent's names are held anonymous for ethical purposes.

The third selection concerned our analysis of data. The interview questions were formulated on the basis of the theoretical framework (i.e. organisational domain, structural elements and organisational processes, criteria of effectiveness, and contextual constraints) and of the operationalisations developed by Kikulis, Slack, Hinings, and Zimmerman (1989) and Slack and Hinings (1987) (i.e. the

organisation's purpose and goal; its levels and nature of specialisation, standardisation and centralisation; its criteria and measurement of effectiveness; and its access to facilities and its access to financial and human resources) and adapted to a Swedish context by Fahlén (2005b) and Stenling and Fahlén (2009). The individual interviews were carried out on separate occasions on the premises of the selected clubs and varied in length between 60 and 90 minutes. The information was transcribed and analysed in four steps. First, it was reduced by the theoretical framework to enable more precise analyses. Then, the respondents' statements were compared with one another in order to analyse individual interpretation schema. In the third step the essences of the individual interpretation schemas was compiled in a collective meaning-creating system. Finally, the collective meaning-creating system was analysed by tracing the fundamental values on which the club as a whole supposedly rested. All four steps were initially taken individually by each of the two authors in order to increase inter-rater reliability in the coding and analysis of data. Information which was given by one respondent and disputed by another was omitted from the analysis in order to avoid giving more credence to one statement over another. The two authors' individual analyses were treated in a similar vain to further improve inter-rater reliability.

Sports clubs' collective fundamental values – result presentation

Context

AC Springhill

In the eyes of the municipality AC Springhill is a big attractive club. It is among the biggest in the municipality with a turnover of about 2.4 million SEK per year and over 750 members, most of whom are children and young people. The club comprises a large senior and veteran organisation and many supporting members. AC Springhill has a long tradition of arranging not only sporting but also social activities, it does elite performances at Swedish top level, arranges

recurrent events and commands a broad network of supporters throughout the municipality.

In the interviews networking is highlighted as an important success factor. In the words of the club chairperson:

> It is absolutely necessary that some of the board members can run the club even during regular work hours and that they have specialist competences that benefit the club. The external communication with authorities and sports federations on different levels and with other clubs, industry and media takes place on a weekly basis.

For all respondents the most important factor for continued development is that the city's biggest upper secondary school will acquire an athletics/disability sport profile and the city its own disability-adapted athletics hall. The profile is supposed to help getting more young athletes to stay in the city, while the hall may create better activities for the disabled but also better conditions for the development of specific sports for the non-disabled. The hall is also of great symbolic importance.

Rawley FC

Rawley FC was founded in 1954 and during its nearly 60-year history it has run a variation of activities. Today the club has about 1,000 members, 700 of whom are active athletes and the rest family members who have joined the club in the form of family membership. The main activities focus on broad child and youth sport and on football and floorball. The core of the organisation is the indoor arena and the adjacent outdoor grass pitch. The facilities are operated by Rawley Arena Ltd, which is entirely owned by the club. Both the facility and the club headquarters are located in the small municipality of Rawley, five kilometres outside the city centre of a larger city. Nevertheless, what characterises the club

is its feeling for the village community with the home address rather than any specific sport interest as the coherent link.

Rawley FC's revenues derive mainly from membership and training fees, municipal and state activity support, local subsidies and some small sums from tasks which the club performs for the local racecourse. The modest sponsor revenues accounted for are with few exceptions directly linked to child participation, that is, the parents of children who participate in activities contribute small sums and products in their roles of business managers and/or employees in some local company. The only major sponsor is a local food retailer. The total club turnover is about 1.8 million SEK per year.

Domain

AC Springhill

AC Springhill was founded in 1956 as a multisport club with its basis in the 4H ideas of Head, Heart, Hands and Health. Today this four-fold idea is summed up in the club's overarching goal: "Feel well instead of winning at all costs – have fun in the club to achieve great solidarity". The club is primarily an athletics club, but disability sports and social services are also included in the programme. Several parallel projects are running in the club localities together with an adult education organisation and the Employment Agency, where people who have been classified as "dropouts" by the Social Insurance Agency administer and organise various events, including sport events. The added value for the club is that members have to make major contributions, e.g. as functionaries, only when the actual events take place.

AC Springhill Special Olympics is the club section for the disabled. Its activities comprise a number of sports where some 30 people with intellectual disabilities take part. Many of them come from the municipal school for the intellectually

disabled, where the chair of the section teaches. In his opinion, Special Olympics makes a great contribution to the goodwill of AC Springhill in demonstrating that everyone is welcome. To the question what the disability activities have added specifically to the organisation the section chair answers that:

> The pleasure of taking part in sport regardless of the level has definitely caught on among the other members. The understanding for individuals with intellectual disabilities has increased within the club at large – and hence in the local community as well.

The elite activities within AC Springhill may be characterised as rather widely scattered geographically with training groups for different sports spread all over the city and the surrounding municipalities. Nevertheless, the "Springhill spirit", which stands for a strong sense of solidarity, seems to permeate its regular meetings in training, competition and social contexts.

Among the elected representatives on the board it is evident how important the recruitment of new members is and how much work is devoted to this. Club representatives arrange school competitions and summer sport schools. Besides, AC Springhill runs the field days and teaches Health in a couple of schools. The club is also frequently invited to other clubs as well as local companies to talk about the value of sound living and voluntary commitment.

Rawley FC

The expressed aim of Rawley FC is to arrange football and floorball activities for children and young people in the neighbourhood as well as recreational gymnastics activities for the elderly. Other explicit ambitions include offering a meeting place for the villagers where they may be active in their leisure time.

The impression is that Rawley FC is the concern of the whole village. A great many villagers have some connection or other with the club. The club's goal is that its activities should attract as many people as possible regardless of their financial circumstances or sport ambitions. No special target group is given priority, according to the club manager, but the endeavour is still to put extra resources on leaders for members between 13 and 16, in the hope of getting more of them to stay on longer. Besides, one person is temporarily employed in a project aiming at engaging the young in administrative jobs and as operative leaders.

This widespread consensus about aims and goals is said to be the outcome of working with the club policy. One guiding principle is that no teams must be "topped". This principle also applies in external communication with the effect that children and parents with elite ambitions turn to other clubs. Another message communicated by the respondents is that the club is willing to receive children and young people who wish to try out a sport and that no fees are charged until the presumptive athletes have made up their minds to stay.

Parents of the children and youth who do sport are said to be the categories with the strongest interest in Rawley FC. They also largely constitute the club's leader team. Another interested party referred to is the wholly club-owned arena company. By being owners of the indoor arena the company controls all access to sport facilities. The club's facilities can also be rented out to the municipality and via this to the neighbouring school. This makes the municipality into another interested party. The rent agreement has also led to Rawley FC taking on the task of arranging and providing leaders to after-school activities. The leaders are also in charge of students with floorball as their "eligible subject".

Structural elements and organisational processes

AC Springhill

The organisation of AC Springhill consists of a board of directors, areas of responsibility, sections and work committees. The board comprises 15 members divided into areas of responsibility: Economy & Administration, Market & Sponsoring; Operation & Arrangements, and Coach Team and Leader Team. The activity-directed sections, which have their own boards but joint work areas, include: Athletics, Cycling, Disability Sport and 4H (with general youth activities and youth culture). All leaders except the three paid head coaches are voluntary workers.

One important principle within AC Springhill is that the coaches should both learn from and supplement one another. The coach teams consist mainly of secondary-school youngsters, active or formerly active athletes who lead various activities under the supervision of the head coaches. The aim is that the teams should include different competencies. The club has adopted a method on using its coaches "in a way that benefits both club and community", in the words of the club chair. The head coach shares his employment between the club and one local Upper Secondary, where the head coach is in charge of the eligible special sport class. The other two paid coaches are hired out to another upper secondary sport school.

Another highly valued principle in the club is to strive towards continual improvement, which is to be attained via a flexible organisation and a creative staff. One expression of this is said to be the generation shift on the board. For about ten years now half of the board has consisted of members in their twenties, and women constitute 50 per cent of the board. The club chair refers to this associative democracy as an absolute necessity for the continued development of AC Springhill.

The internal work with rules and routines is characterised by an open and tentative approach with the focus on participation. The club has chosen to work in a non-hierarchic manner with few guidelines from the board. An overarching policy document for the whole club is produced every three years. On top of that, most of the everyday work takes place in sections and work committees with tasks and responsibilities distributed among a number of members. There are no job descriptions and only a few formal positions in the club. The treasurer explains in the interview that this is indirectly due to the initiator and the form of activity. The system is built on a substantial element of freedom, experience and a continuously on-going dialogue. This dialogue is described by the respondents in terms of AC Springhill's unusually high number of policy discussions. "Values cannot be set down in writing, because this makes people lose their interest and commitment" in the words of the treasurer. Instead frameworks in the form of rules, budgets and policies are preferred, within which those who are active in the club are completely free to create activities and formulate projects of their own.

The board comprises members from all sections. New items and initiatives are turned into tasks, which are delegated to the sections or work committees within one of the intersectional working areas. Issues that are considered especially important by the annual meeting are focused on in workshops a couple of times every year.

When the club chair describes the above-mentioned meetings, trying to explain why AC Springhill seems to combine elite and club sport in a way that is appreciated by everyone concerned, the club chair refers to the member consensus about the basic ideology. In addition, there is no mixing of economies between the groups, since the elite athletes have their own sponsors. It is true that the club as a whole assigns a certain sum of money to the elite athletes,

which is distributed according to an internal scoring system, but the amount is relatively small and a dialogue about this is always kept open with the other member groups. A further explanation that the broad and elite activities function so well side by side, according to the chair, is that the elite take part in club activities like everyone else. This is extremely important, the club chair says: “If the distance grows too large between different member groups the confidence in the management and the mutual trust among members will decrease.” One important link between elite and broad sports consists of the head coaches, who not only take care of the elite but also coach the youth leaders, who are in charge of broad sports activities.

The training philosophy seems to be the same among all the AC Springhill coaches, regardless of age, education and responsibility. What permeates the activities is that everyone who wants to should be given the chance to develop. According to all the respondents, this is best achieved by avoiding divisions of various kinds as far as possible. For this reason girls and boys train together, and male and female leaders coach male and female members to about the same extent. Besides, once every week all athletes train together to associate and learn to know one another better, but also to encourage each other and develop in their different sports. In order to support the common identity they also travel together to at least one major competition every year.

Rawley FC

Rawley FC consists of three sections: football, floorball and recreational sport. The club’s management is traditionally organised with annual meetings, board and office (with an office employee on half time and one fixed-term full-time employee). The club’s independent Arena Company has its own board, CEO and a full-time caretaker. The sections, which have their own boards and about seventy leaders in all, are completely independent with regard to activity

framework and direction. They are also responsible for their own budgets. According to the respondents engaged in the football and floorball section, the club board is not involved in section activities as long as they function and keep to their budget. The only intersectional cooperation has to do with the distribution of training hours and a few other joint commitments.

Within Rawley FC the same principles apply to all core activities. The underlying assumption is that it is the parents of the children in each new cohort who are responsible for starting new teams. The volunteer youth leader explains:

> If none of the parents step up and take responsibility for gathering the other parents with kids in that age group and make an inventory of the interest among the kids for playing floor ball, the consequence might very well be that no new team is started that year.

It is the responsibility of the parent collective to find out whether there is enough basis in the cohort to start a new team. They also appoint head and assistant coaches, team leaders and two team parents. In most cases both girls and boys take part in the same activities in the first year or two. Only when they start playing in leagues, which usually happens when the participants turn eight, is the group split according to sex. The club and its sections do not recommend league games before the age of eight. Still, it is a matter for each team to decide.

Every team is responsible for its own costs and revenues. The teams are also in charge of reports of attendance and the bookkeeping of municipal and state activity support. The team can attract financial support either by engaging sponsors or by performing certain tasks within and without the club. At the same time it has to defray all costs like referee fees, travel expenses etc. The training

fee paid by each participant goes into the team funds, while the membership fee is used for covering the club's overarching costs.

Everyday activities are controlled by the overarching work on policy, which was conducted by the club's policy ombudsman a couple of years ago and is manifested in a 47-page document. This document regulates the job descriptions of all functions as well as the descriptions of the functions in all units. Further, members' rights and obligations are clearly stipulated in the club statutes. In addition, each team makes its own agreements. The common goal is to involve as many parents as possible so as to spread responsibility and tasks in the hope of not causing any individual burnout.

Rawley FC's internal communication takes place primarily via the joint website, the separate section websites and the separate team websites. With the primary purpose of creating consensus throughout the club on the agreements made jointly, intersectional leader meetings are arranged. The sections in turn organise leader meetings with more sports-specific contents. Apart from these the club has an annual meeting, recurrent member and monthly board meetings, while the sections themselves organise section board meetings, and the teams have regular team and parent meetings. The attendance is generally good, as indicated by the respondents' answers. Major decisions on facility utilisation and budgets are made by the club and section boards, while practically all decisions that immediately concern sporting activities are taken by coaches and team leaders.

One important asset for Rawley FC is their indoor arena. The establishment of this facility forms an important symbol of club solidarity and the link to the village. The hall has also enabled the village seniors to arrange recreational activities organised by the recreation section. The greatest club asset, according to the respondents, though, is all the leaders who are engaged as board members,

coaches and team leaders. The commitment is great, but the feeling persists that there are never enough leaders for solving all the tasks. A distinct element in the strategies for engaging more leaders is that the establishment of new teams is conditioned by parent commitment. Unless a sufficient number of parents commit themselves, there will be no team. The key, as expressed by one of the coaches, is to make demands on parents at an early stage and to clarify what obligations attend membership in the club. Another clear strategy developed by the club to offset the shortage of leaders is to engage the members in minor time-limited projects instead of trying to tie them to more comprehensive positions.

Criteria of effectiveness

AC Springhill

To the coaches of AC Springhill success is to "exceed expectations". According to the board members, medals are certainly a sign of success, but it is even more important to manage to come back from poor results. They also underline that results in the club context mean much more than good competition positions. According to the treasurer, the crucial point is that people like what the club does, which may be noticed in the thickness of the annual report and the member register and the size of financial grants. For the chair the most important issue is that the internal discussion of different concepts of success goes on continually.

Rawley FC

All the interviewed representatives agree that the successes of Rawley FC are only marginally linked to how well the teams perform on the arena. What counts is instead having a sizeable membership and few people that quit. The latter aspect is followed up annually to keep track of what are people's reasons for quitting. The activity leader explains:

> At the end of each season we make records together with each team's coaches of those, if any, who have left the club. Then we make contact with each and every one and discuss the reasons for them leaving.

The common impression is that there are few who cease being members for the reasons that are usually claimed to be the big problems of club sport. The case is rather that families move out and join some other club closer to where they live, or that an athlete has higher sport ambitions than Rawley FC.

Good sport environments– discussion and conclusions

AC Springhill and Rawley FC face similar dilemmas and struggle with the same problems as many other clubs in today's Sweden. The feature that draws our attention is not so much that they grapple with these difficulties, but the ways this is done.

Interestingly enough there are many similarities between the two selected clubs, even though they are placed in different geographical contexts. Previous research has, as we have mentioned before, indicated differences between clubs based in major municipality centres and clubs based in surrounding rural districts – but our study seems to show examples of clubs that seems to have succeeded in embracing the best of both worlds. The city-based club acts as a rural club when it comes to networking and socialising, while the rural club acts as an urban club when it comes to strategies for recruiting members and resources.

The analyses in this study show that a key to working with many of the problems experienced by the club is expansion. To continually keep expanding is apparently both a goal and a means. As a goal in terms of ascertaining the

long-term survival of the club, with the idea that a big organisation has a greater chance to survive in the long run than a small one, and as a means in terms of the expectations on a big club to be better at answering to the needs expressed by members and external interested parties. The thought model seems to build on the notion that a big club can muster more and bigger resources and that these can be used for marketing measures like engaging the club in non-sporting activities and sheer recruitment activities. The motivation behind the efforts of both types is that they will generate more members and, in the long run, even more resources. Since the very size is looked upon as a key to making a greater local impact, it is believed that the club will also attract attention from other spheres of society, which is important for building up the network that is supposed to play a crucial part in the hunt for new resources.

A great many of the discussions taking place in our clubs consequently turn around strategies for expansion. In the case of Rawley FC they concern the role of the indoor arena, for instance, as a symbol for the club's local commitment. This is considered important both for increasing membership and for drawing attention from sponsors. For AC Springhill it is the commitment to work training, to the intellectually disabled, and to school health projects which may symbolise the club's expansion strategies.

In what way are the ambitions and strategies for expansion an expression of the collective fundamental values of the sports clubs? With regard to club aims and goals, the motto of AC Springhill is revealing: "Feel well instead of winning at any cost – have fun in the club to achieve great solidarity". The non-sporting social commitment is central. In Rawley FC the social and societal pathos is not as explicit but it still shines through the goal: "[…] to offer the population of Rawley a natural meeting place […] without being limited by financial circumstances or sport ambitions". These ambitions also stamp the way the

clubs arrange their activities. In AC Springhill it is reflected in the way the club looks upon its coaches' double roles – "for both club and community"– as club coaches and school teachers, as well as in the way the club organises the joint youth activity and youth culture areas.

The clubs' internal result assessment is also in accordance with expansion ambitions and strategies. Success is hardly linked at all with sport results and table positions, but rather with membership size and few resignations, as in the case of Rawley FC, and with the volume of the annual report, the member register and the financial contributions on the part of AC Springhill.

Another key to problem solving seems to read decentralisation. Even here the key has the double function of goals and means. As goals in the feeling that authority decentralisation leads to greater solidarity and commitment among members, which is supposed in the long run to guarantee the vitality of a club with a capacity to safeguard its survival. As means in terms of decentralised responsibility for, e.g., the recruitment of members, the provision of leaders and of resources, which is felt to achieve better results than when responsibility is centralised to board and main administration. A great many of the processes we have studied focus on decentralisation strategies. For AC Springhill they involve keeping the different sections' economies separate and distributing tasks widely among the members. For Rawley FC they are about giving the sections free disposal of their own activity frames and directions.

When breaking down authority and responsibility and linking these aspects to values, we found them expressed in Rawley FC's explicit demands on parents whose children are active in the club: Unless a sufficient number of parents commit themselves there will be no team for the children to play in. Membership is conditioned, and so are its accompanying obligations. Another

related principle involves that it is the parent collective that has the chief responsibility for everything from recruiting members and coaches to conducting and financing activities. In AC Springhill these principles of decentralisation are not as explicit but nevertheless indicate that members are completely free to create their own activities and formulate projects as long as they keep within the budget frames and policies of the club.

To summarise, our analyses have demonstrated how successful sports clubs that are generally appreciated by the sport movement as well as by the surrounding community work with society-related dilemmas and sport-specific problems. We have traced elements in sports club activities and environments which have promoted this work. By analysing these we have been able to describe the values on which these activities rest and, vice versa, the importance of the collective meaning created in the sports clubs for their activity principles.

One thing we have not been able to demonstrate more accurately is whether there exist elements in sports club activities and environments that are connected with their geographical location and activity focus; Rawley FC is a sport for all oriented, urban club whereas AC Springhill is more of a rural club with a complementary elite focus. This deficiency is a result of the limited selection in the study. Our results, though, seems to point at the opposite; i.e. that sport club activities (and goals) and environments are dependent variables while geographical location is an independent one. This may be taken as a hypothesis. In brief, more comparative research is required, involving studies with other selections than ours, to proceed further in this field.

We nevertheless hope that our contribution, in addition to constituting empirical material for comparison, may also form the starting point for further methodological efforts as well as a further theoretical understanding of

collective meaning creation. This may be done through continued studies of fundamental values and their importance to activity principles and, in extension, to their potential for serving as good sport environments in Swedish club sport.

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Early Physical Education for preschool age – a didactical approach

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Abstract

The conditions of life in so called post-modern societies have changed fundamentally in recent decades – for adults as well as for children. One of the main consequences is that education is emphasized more than in the past. Research has shown that important decisions about the capability of education are taken long before a child enters its school career, hence early education has come into focus more and more. Within this the role of sensual experience has been increasingly stressed, sensual experiences that are primarily combined with movement and physical education. Preschool-age is a very important and influential phase in learning. Therefore it's the main concern of this article that Early Physical Education should take place in all preschool-institutions – in different ways: on the one hand as free, undirected, undisturbed children's movement and play and on the other hand as special opportunities for motor training to extend coordinative capabilities. The target of Early Physical Education is the development of a child's individual personality – not an athlete's career. The content is focused on numerous and varied scenarios for experiences in movement, on coordinative abilities and on basic movement skills in physical activity. With regard to the methods the discussion is not about an open approach or a closed method – the question is how to optimize each of these methods. By dealing with genuine didactical questions about aims and purposes, contents and methods of Early Physical Education, in this article some didactical principles are developed, serving as a suggestion about how to accomplish and maintain a high quality in the physical education at preschool age.

Key words: Physical education, preschool-age, didactic, living conditions of children in contemporary times, pedagogic of sports

Introduction

“Tempus fugit", said the Romans about 2000 years ago to express their impression that time flies by. Yet our age, more than any before, is characterized by acceleration. Not having time is an impression we gain from both our leisure activities and our job. High mobility, fast and even faster devices of communication, multi-tasking.... Above all, young people are confronted with and taken hostage by this ever changing lifestyle. The price for this ‘even faster’ and ‘even more’ is a high level of stress, burn-out, depression and exhaustion syndromes (Winterhoff, 2011). With young people, cases of psychological problems now outnumber infectious diseases by far (KiGGS-Studie, 2008).

At first sight, technical innovations seem to be the prime reasons for our accelerated life style: think of mobile phones, internet and the computer. However, according to H. Küng, the reasons date further back to the beginning of the postmodern age. Since the end of World War I a global change has taken place (Küng, 2010, p.21) in the course of which today's problems began to appear. They mainly concern values, norms and meaning of life. The attempts to solve these problems which the 20th century offered, Socialism, New Capitalism, and "Japanism", have proven inadequate. Western societies in particular still face the challenge of finding the key to the problems implied above (Küng, 2010, pp.25ff.).

In this context, education seems to be of an even higher importance because it creates the basis for the solutions needed. If we look at the matter more closely the sector of public education has to take over a responsibility that came into existence because traditions were lost and family structures changed – also a characteristic feature of the post-modern world – and it has the key function of preparing young people for a changing world. Education serves as a basis for individualism or personal life management, for taking part in the economy (the

ability to work, the workplace) and in leisure time activities as well as in consumerism (Schmid, 1999). This does not only apply to the social sphere of privileged persons but education should preferably be an education for everyone (Klafki, 1969).

As this challenge exists for many nations at the same time our current age of globalization requires international comparative research which may yield tangible results concerning the how and why of the best public educational system (e.g. TIMSS, PISA).

During the last few years we have come to recognize that education does not start with school life but much earlier. Indeed, important influences governing a successful educational career are made long before this. Because of this we have focused more and more on early education.
Research shows that major reasons for a rapid development of motor skills at preschool age, e.g. the sensual and motor experiences which are fundamental for the brain's development, can only increase as far as they are motivated and challenged through the personal and material environment (Schäfer, 2007). At the same time we are aware of the fact that many families cannot supply this sufficiently due to the changes in post-modern life.

Every popular developmental psychologist of the 20th century, e.g. J. Piaget, J.S. Bruner, L.S. Wygotski, points out that the actual level of a child's physical activity is the basis of his or her general development (Zimmer, 2004, p.11). However we need to critically consider:

- whether education does not come too late for those children who enter kindergarten in the third year of their lives, especially as this entry is not compulsory;

- what early education should look like in general;
- whether different types of kindergarten and preschool education can indeed replace fathers and mothers (especially regarding a holistic education which is not only focused on cognitive training).

Today's childhood is characterized by consumerism: technical mobility and media usage which accounts for a lack of physical exercise (Brettschneider, 2005). This phenomenon is linked to a lack of sensual perception and the lack of direct sensual fundamental experiences. Against the background of changes in post-modern life, the essential necessity of physical exercise (here: movement in the widest sense) for the development of a child becomes obvious; not only is physical action the most genuine approach a child has to the world, but we can indeed say that active movement and perception can never be separated. This means that motor activity improves intelligence (Zimmer, 2004a) and educates (Schäfer, 2007). The recognition that movement and education belong together has consistently led to a transfer of physical education to public institutions.

This higher evaluation of physical education brought up some new questions concerning the practical realization of physical education:

- What exactly should physical education in preschool age look like?
- How can its quality be guaranteed?
- Which targets should be pursued and what content should be included?
- How should the education process be designed and what materials are suited best?

These are specific didactical questions which will be answered by the following article concerning Early Physical Education in public institutions such as kindergarten or pre-school.

Definition

Didactics

Following W. Jank and H. Meyer (2005) didactics comprises everything that affects teaching and learning processes. The concept can be elaborated by considering aspects such as planning, design and reflection on learning/teaching processes as well as theory-based professional action that adds scientific recognition to subjective theories and thus questions and further improves on them (Horn, 2009).

Movement

'Movement' here is understood as being something between any physical activity and sport. The target being that the children move at all. Besides free physical action, tutored tasks are featured which extend the movement potential in regard to perseverance and coordination.

Education

Even though there is no doubt about the existence of latent and unconscious education (e.g. by surroundings, peer groups), education here is understood as a scenario in which an older, more experienced person provides challenges which open up new horizons and motivation to try out something new. "Not-yet-being-able-to" is turned into "being-able-to".

One form of physical education

Physical education includes a diverse, versatile and regular program related to stamina and coordination, for example by means of playing games, by exploring one's own body and its capabilities, by getting to know materials and how to handle them. Against this background there has to be many forms of physical education - according to season as well as personal and special conditions. Thus, in the following we are talking about an exemplary form of physical education.

Such a form of education, of course, needs to be coherent and also needs to include all aspects of physical education at preschool age.

Preschool age

Preschoolers are identified as children aged five to six years old (this refers to chronological age). Individual differences that occur during the given time span of two years can be enormous as was shown in the project “Vorschüler in Bewegung” (Preschoolers on the move) which was carried out at the University of Education Schwäbisch Gmünd from 2008-2012 (Basic et al., 2012).

Aspects of children's living conditions in contemporary times

The paradigm of socialization theory describes developments in the 1970s and 80s which had a deep impact on the world of children in the Western world. R. Zimmer sums up some characteristics which mirror the dynamic 'impulse of modernization' (Fölling-Albers, 2001, p.40) during these decades:

> Loss of street play and increasing domestication in childhood, loss of natural play opportunities, thus also of physical movement, and their replacement by artificial spaces, transfer of physical activity from “every-day-childhood” into institutionalized sport clubs, isolation of living environments, discovery of children as a target group for processing industries, mono-functionality of games, increase of media consumption (Zimmer, 2004).

Television especially has been evaluated rather critically in regard to a loss of physical movement, a potential overflow of impulses, the loss of social links and of direct experiences. M. Fölling-Albers speaks about the 'TV-childhood' (Fölling-Albers, 2001, p.14). In a traditional setting childhood, which the period of Enlightenment once defined as a period of life in its own right, was clearly separated from the world of adults. It had the function of a special preservation of time and these new developments were equated with a loss of childhood

(Postman, 1983). Further observations such as changes in family structures (single parents, same-sex partnerships, patchwork families), the style of education (a change from a strict to a more liberal style of education), decreasing motor skills and the increase of adiposity complete the picture.
These sociological views on changes in the life of children have in common that they contrast "today" and "earlier" – with “earlier" being defined as the better and more idyllic world.

In the meantime the focus on deficits due to social changes has changed and a few positive perspectives concerning a child’s world today have been added:

- even though children today grow up in a media cosmos in which second-hand recognition and information predominate these also facilitate information research;
- even though the technical world conceals the connection between cause and effect, it still helps children to grow into this world in a natural way by dealing with media and technology;
- on the one hand our world is focused on consumerism which favors the consumption of ready made products and places it above personal activity, but on the other hand children are seen as an important group of consumers;
- even though we live in a world of institutionalized and organized games or other activities, a wide range of new physical exercises has come into existence which was not offered a few decades ago (Zimmer, 2008; Fragner, 2012).

In the 1990s the way childhood research was carried out changed, especially under the impact of Constructivism. Childhood, here, is mainly seen as a social concept. That is: as a specific period of life in its own right, the characteristics

and quality of which are defined by society. The child is in focus as a protagonist that educates him or herself.

Today the opinion prevails that both sides must pay equal attention to the given social context, however modified, as well as to the individual child. Thus, the new form of childhood research has led to a great variety of information about how children live today, how they describe their own childhood and interpret it. Research shows how childhood is ‘manufactured’ on a political and social level. Thus, educational decisions and measures for or with children may be justified in a better way. Even so they cannot replace educational decisions and measures taken by educators (Fölling-Albers, 2001, p.18).

The major pedagogical insights we have gained from sociological research in the last few decades make it necessary to draw conclusions from the changes in the living environment of children today. As stated in the introduction, these also include the fact that physical education needs to be established in public institutions (Zimmer, 2008a).

Why physical education at preschool age?

First we need to state that the necessity of physical education is not about establishing this education either at preschool age or at a later point in time. It aims at both. Here, the emphasis is on physical education in preschools. Physical education during early childhood development is indispensable because experiences of physical activity include sensual perception which is indispensable for self-awareness and an understanding of the world. Expressions like 'behind', 'in front', 'above', 'below', 'quick' and 'slow' are experienced by movement (Zimmer, 2004a; 2010). Brain research supports the importance of immediate experiences (Hüther, 2007; Spitzer, 2010). In addition, any playing

scenario that includes the physical engagement of a child can be considered a joyful and fulfilling activity in the 'here and now' (Horn, 2010).
Children's experience of themselves and the world by means of physical activity seems to be a largely holistic process (Zimmer, 2010). Learning at this age is rarely based on imagining and abstract thinking but usually takes place by means of concrete operations in regard to people, objects and situations (Heim, 2008; Deffner, 2012). Learning takes place by perception, movement and by using all senses (Zimmer, 2005). A child needs to cope with situations practically in order to deal with them and then to progress to a theoretical level (Zimmer, 2009a, 45; Schütz, 2012). Sensual perceptions are accomplished by the whole body and feelings are expressed by movements. Wish and reality, imagination and perception, thinking and doing, everyday life and dream world are not clearly separated. This separation takes place during the course of development (Zimmer, 2009).

When a child is active he or she experiences him or herself as a protagonist who can move, change and create: it is truly an experience of effectiveness (Zimmer 2009). The child experiences that it is worth remaining with a task in order to be successful. While doing physical tasks a child observes his or her own body and his or her own personality. Children understand what they can achieve. They gain the ability to evaluate themselves and begin to be confident about their own skills. The major reasons for a fast development of motor skills at preschool age are physical activity and active coping with the environment, i.e. trying out and being curious about the new and the unknown. From this we deduce that good motor skills are not only defined by genetic preconditions but are also the result of varied learning experiences (Zimmer, 2008). In other words, the social surroundings and the opportunities they give have significant impact. The preschool period is a very influential phase in learning, it is “the golden learning age” (Weineck, 2007, p.182). Progress is revealed in the way children perform

physical actions. For example, basic movements like running, jumping, throwing are differentiated and improved, rough forms are turned into fine forms, movements are carried out more carefully and with a better flow, sequences of movements can be combined in a better way. All these improvements can be characterized by the following aspects:

- rapid improvement quality of performance as well as how it is demonstrated
- significant increase in the availability of motor solutions to different situations and combination of basic forms of movement, usually including walking and running
- impressive improvement of all coordinative capabilities to a new level as well as an increase in endurance (Scheid, 2009, p.288).

Due to a faster development of the brain at this age, the ability to cope with coordinative tasks during this phase improves quickly. Additionally, preschoolers equate motor skills with prestige. Children who can run quickly or overcome obstacles in a skilled way or who are good at throwing and catching are preferred peers (Weineck, 2007; Klotz, 2012). The following perspectives on the necessity of physical education also show why it should be established in preschools and in kindergartens:

- anthropological perspective: man is a being focused on movement and sensual perception;
- developmental psychology: a child needs multiple opportunities to explore his or her concrete surroundings by play and movement;
- sociological perspective: it is necessary to offer opportunities for movement in order to compensate for deficits in today's world caused by social changes;

- psychology of learning: compensation for the deficits caused by social changes (Zimmer, 2007, p. 24);
- aspects of health and its prevention: compensation for a lack of movement, age appropriate motivation for growth and development;
- motor dimension: accumulation of multiple movement experiences, extension of motor skills;
- social aspects: action games as an opportunity to promote social behavior – for example, adapting to a partner, cooperation, respect for rules (Krombholz, 2005; Haug, 2012).

Following the "konstruktiv-kritische Didaktik" of W. Klafki, didactics on a general level needs to look at the targets, the contents, the methods and the media (or rather the material) involved. However, the focus of the "konstruktiv-kritische Didaktik" lies on the target level. The following aspects play the main role in creating a didactical model for physical education at preschool age.

Targets of physical education at preschool age

Physical activity has gained a higher significance due to changes in the world of children and because of new pedagogical thoughts and recent recognition of the developmental processes in children (Zimmer, 2008a). On the one hand, movement has to be seen as a comprehensive mediator in the advancement of development and on the other hand, as an important area of learning in kindergarten or preschool (Zimmer, 2004; Haug, 2012). Thus, we can deduce targets for physical education at preschool age which contribute to experience of the body, self, senses, material and social group (Zimmer, 2004). In order to provide experiences in these areas, which can be separated only on a theoretical level, it is important that preschoolers are confronted with numerous and varied scenarios for learning and practicing different movements. Physical education consistently needs to create opportunities, space and time for children to cope

with different objects and other children, both self-dependant and tutored, as well as alone and in cooperation with other children.

Hence it is necessary to create opportunities for physical activity. This means, for successful realization it is important to support the natural urge of children to move and to advance their natural behavior when it comes to moving and playing. As a general precondition it is important to supply time, space and material for undirected, undisturbed, uninfluenced free movement and play (Horn, 2010a).

Furthermore it is necessary in Early Physical Education to create special situations which are a challenge, an extension and a differentiation for children's imagination (Heitmann, 1979). In these situations children will be enabled to make discoveries about themselves, about the abilities of their bodies, about the surroundings they move in and all the material they find in it. In the course of this it is important to create situations in which children feel good. Autonomy, self-reliance and social behavior are the key issues here (Marktscheffel, 2007; Haug, 2012).

As discussed before, preschool age offers special opportunities for motor training. First of all, in this stage of life it is important to extend coordinative capabilities. Thus the contents of physical education in kindergarten should not be aimed at a mere practice of sports but at basic movement skills. The research of Rethorst et al. shows that this leads to a sustainable better motor development of children – especially for underperforming children (Rethorst et al., 2008).

Advancement of cognitive development, movement and the way the child perceives him or herself within the world are often closely linked. Thus, physical education is not only about the improvement of motor skills but it is

also fundamental for further cognitive development. For this reason Piaget (1978) sees the manipulation of objects by experimenting and using experiences as the basis for the development of intelligence (Zimmer, 2009a).

Furthermore: While early childhood is marked by a high degree of self-centeredness, at preschool age social behavior starts to emerge. This has various dimensions. It comprises the readiness to play together with stronger and weaker children, the building-up of social sensitivity, the ability to make contact and to cooperate, the emergence of a frustration-tolerance and thoughtfulness, and an understanding of rules which includes keeping, modifying and sanctioning them (Zimmer, 2004; Fragner, 2012).

To sum up, it is important to point out again that preschool age is mainly characterized by a holistic experience of the child's self and the world. For this reason the purpose of physical education is to create opportunities to approach the world in a realistic and sensual way - alone or together with other children and day-care teachers. We need to avoid both a uni-dimensional focus and any type of utilization of movement and play. The target of physical education has to contribute to the holistic development of a child.

Contents of physical education at preschool age

Even though different types of sport (e.g. female gymnastics, figure skating) require early specialization (that is: already at preschool age) none of the ideas related to sports can play a role for physical education at kindergarten. Of course we can say that if a child discovers his or her interest or talents in a specific type of sport during physical education he or she can consequently take part in club training. However, this is not the target we are talking about here. Physical education at preschool age is virtually an area of motor learning that serves to develop personality. It is a specific area of its own. At preschool age it is

important to start off with a joyful, varied, child-appropriate and versatile motor education. The main focus lies on the extension of the repertoire of movements (Weineck, 2007). The basic forms of movement within the fundamental movement types, running, jumping, climbing, catching, throwing, have to be further developed and the first combinations of movements have to be learnt. Here, coordination plays the main role. Every hitherto unknown movement is carried out on the basis of the old, or at least existing movement combinations. The more varied the repertoire of movement is with which a child has been equipped, the more easily can a child acquire new abilities. For this reason practice of coordination training has to be at the centre of physical education at preschool age. On the basis of these ideas modules for the following eight basic movement types are elaborated upon during the project "Vorschüler in Bewegung": running, hopping and jumping, balancing, rolling and supporting, moving with every day materials, climbing, ball coordination and an additional field. The corresponding 220 modules are laid out to take five to eight minutes and they can be subdivided into compulsory modules (in order to create comparisons between the intervention groups in 15 kindergartens and the five control samples (Basic et al., 2012)). Sport pedagogy defines coordination as the combination of movements, movement phases and individual movement acts (Meinel & Schnabel, 2006). The performance of movement combinations is largely dependent on the ability to carry out single movements. This means that the child must be given the time and opportunity to learn the movements, to build them up and to use them. There are great inter-individual differences in the ability to move which means that physical education has to take place on an individual level, that is with an internal differentiation of learner groups and by in-class grouping.

We can further describe the advancement and improvement of coordination. Coordination can be understood as coordination capabilities: orientation in time

and space, reaction, balance, rhythm and the ability to differentiate (Hirtz, 1985). Coordination can also be understood as the connection and change of muscular processes (Weineck, 2007). As mentioned above, coordination capabilities grow in leaps and bounds during childhood. This is due to the fast maturation of the central nervous system, a high plasticity of the brain and an improvement in information processing. Consequently the training of coordination skills can never take place too early, yet may be misplaced by using inappropriate methods and contents and thus following a type of physical education which is inappropriate to the developmental stage of a child (Weineck, 2007).

Children's proficiency in moving has suffered from the changes in their living environment. This includes the perception and evaluation of situations and potential threats which are impaired by a lack of experience and a decline in coordinative abilities. Thus, the improvement and development of good self-perception and the ability to physically respond are extremely important, mainly in order to avoid accidents. The more varied and diverse the opportunities for physical activities are the better the proficiency of movement will be and more experiences can be gained (Marktscheffel, 2007; Haug, 2012).

Although physical education at preschool age should not target specific training for a specific sport, there is still a proper technique for many movements. This means that an appropriate physical program cannot simply supervise the movements of children and confine itself to leaving them alone with their subjective solutions to physical tasks. Proper rolling, throwing, running (Horn/Pietsch, 2008) require a technique that finally leads to a perfect performance. E.g. the technique of throwing involves a wide backswing, stemming from firm ground contact with both feet, having the opposite foot to the throwing hand in front, releasing the ball from above the head (Horn/ Weber,

2012). This should already be targeted at preschool age in order to enable the acquisition of specific variations (such as a shorter backswing in handball) and a subjective variation of movements (for example an individual rhythm (Hotz, 2009).

General principles of physical education at preschool age

If physical education wants to maintain the joy children take in moving and still reach its aim of further improvement of their competences it is necessary to formulate didactical principles for working with children of this age. The first five principles can be adapted from training theories (Frey/Hildenbrandt, 1995):

The principle of continuity

As learning largely relies on regularity, we need to define fixed time frames for free movement and play (best on a daily basis) as well as for tutored physical activity (at least twice, preferably three times per week).

The principle of increasing exertion

In order to achieve long term improvement in the advancement of coordination capabilities it is important to pay attention to this principle which results from the connection between exertion, adaption and increase in ability (which equals the new starting level). This means that the demand for coordination and stamina needs to be raised from lesson to lesson. The same level of exertion will simply lead to a preservation of abilities but not to an improvement (Weineck, 2007). Additionally, mere repetition of movements which have been mastered inevitably leads to boredom. Curiosity and motivation, the reason to carry on and learn more would be lost.

The principle of individual exertion

Because mental and physical fitness, individual acceptance as well as interest and special needs of children can vary greatly, the same exercise can pose an excessive demand on one child while another is left unchallenged. Therefore, opportunities and tasks in physical education must be differentiated so that every child can be challenged and aided individually. On a practical level this means that in-class-grouping always needs to be considered while preparing a lesson. Often this does not require a completely individualized form of teaching but often it is enough to offer the same tasks for homogeneous groups or a variety of tasks at the same learning stations. This can give a feeling of success to every child which strengthens the self-picture and maintains the joy children take in moving. Repeated failure can lead to an avoidance of physical challenges in the future which will then result in a decreasing proficiency in movement and finally lead to a minimization of abilities (Zimmer, 2004; Schütz, 2012).

The principle of accentuation

Within a single session of physical education and also during a sequence of more than one session, specific focuses concerning coordination training can be set - for example the advancement of balance. Movement tasks e.g. on stable ground, increasingly narrow ground, instable ground lead to increasing fascination which in turn leads to a more intensive learning.

The principle of repetition

Children are not only curious about new things but they also need the security which stems from familiar and known things. Careful repetition of physical exercises which have already been learned leads to security and confirms the experience of competence. Because children are frequently unaware of this, group reflections and talks are recommended, seeing as meaningful

communication is one of the ten characteristics of a good physical education lesson (Meyer, 2005; Horn, 2009).

According to Zimmer (2009a) it is necessary to consider the following five didactical principles as the key principles for physical education at preschool age.

The principle of child-appropriateness

This comprises an orientation on the interests, thought processes and the urge to move, which naturally exist in children.

The balance between familiar aspects that help to orientate and new elements that create curiosity and motivate children to explore, have to be mentioned again here. Included will be tasks that are connected to the children's environment, child-appropriate material, and the wrapping up. Music plays an important part in developing appropriate activities for children.

The principle of openness

This describes the day-care teacher's ability to make contextualized changes to the planned physical exercises. This calls for flexibility, for example when adopting the ideas of the children.

The principle of peak experience

As already implied, children's imagination should be utilized and advanced at the same time. Movements are not simply requested but they are embedded in a context. For example: A gym bench is turned into a bridge, balance exercises are turned into rope artist shows, a roll forward on the ground simulates stones that roll down a mountain or a steep slope, massages resemble pizza baking.

The principle of freedom and autonomy

The day-care teacher simply offers stimuli. Children are supposed to make their own decisions according to their individual abilities and the given framework. Children should be able to act in a self-determined way. As early as possible they should learn to assess themselves and the levels of difficulties which are brought about by the range of exercises offered.

Physical exercises should challenge children to act autonomously as often as possible. Autonomy here means that free will is important because the understanding of duty is still undeveloped among younger children. At the same time it is a precondition for their development, self-confidence and personal strength (Quante/Liebisch, 2002). Children should be given various opportunities to try out their own ideas, to experiment with gadgets and materials and to innovate in order to gain varied and comprehensive experiences as well as knowledge. Certain materials such as balloons or beach balls are extremely suitable for open tasks. While the children work with new materials and movement tasks, the day-care teacher can generate motivation and impulses to advance the children's abilities. This way the learners find their own solutions and can immediately relate success or failure to themselves. This experience in self-efficacy supports the building-up of a positive self-picture (Zimmer, 2005). Autonomy can be seen as the key to (self-) education.

Additionally, we need to point out a few further principles.

Rituals and rules

This principle is also based on the natural longing for the known and familiar. Rituals offer security, orientation, psychological safety, trust in the children's own surroundings and a feeling of belonging (Sustek, 1995). Rules regulate and set limits but at the same time they offer a clear and reliable frame. Rules and

rituals are also necessary in order to build up a good group experience. Rituals, e.g. getting together in a circle, can mark the beginning and the end of a lesson and serve as a familiar structure. Rules such as, ‘one person speaks while the others listen’, offer a high amount of real learning time. This is another criterion of good educational lessons in general and good physical education lessons in particular (Meyer, 2005; Horn, 2009).

The holistic principle

Motor skills training should not be considered from a merely physical perspective but should call for involvement of the whole person (Meinel/ Schnabel, 2006, p. 31). By moving, children learn in many different ways and at completely different levels. Not only do children find out more about their own body and their own abilities but they also make haptic, emotional and social observations. All experiences children gather in their early childhood have a significant influence on the development of their personality. Additionally, motor skills cannot be seen as an isolated variable in the building-up of personality, they go hand in hand with a child’s moral, intellectual and social development (Meinel/ Schnabel, 2006; Haug, 2012).

The principle of presenting a movement

Often enough language is “the source of all misunderstandings" (The Little Prince, Saint-Exupery). This can also be observed in physical education because the language competence of children can differ enormously - the same applies to attention and concentration. Furthermore, the abstract explanation of a movement is mainly based on the day-care teacher’s specific vocabulary which can be unknown to some of the children. In such situations the demonstration of a movement can be a quick help, which can be carried out either by the educator or by one of the children. The important thing is that the different phases of the movement come out clearly in the demonstration.

The principle of play

The way a child relates to the world is mainly through play (Zimmer, 2004). Children at preschool age learn unconsciously and preferably by playing. Many of the aforementioned aspects are combined in this. A game invites children to take part, it motivates and it challenges them in a holistic way. It promotes social learning especially when playing together or against each other. Children learn how to relate to other children while playing; they learn how to distance themselves and how to integrate. Arising problems call for a yet higher competence in solving them - communication and cooperation are called for (Zimmer, 2004). In a nutshell: physical education should comprise of play as much as possible. At least it has to stick to the basic rule that each physical education lesson must include an element of play. If a game is not the main part of a lesson this element could be the introduction and/or the end of a lesson.

Methods of Early Physical Education

Although some comments of methodology have already been given in this article it is necessary to add some more ideas on methods.

The discussion about which one of the basic methods is better, an open approach with the focus on the children or a closed one with the focus on the teacher, can be seen as obsolete. Instead of continuing this discussion we ought to think about and focus on research concerning how to optimize each of these methods (Meyer, 2005; Horn, 2009).

On the one hand the need for a clear structure is the most important characteristic of a good lesson (Meyer, 2005), for each physical education lesson as well as of sequences. Furthermore we emphasized the need for a thorough lesson planning process on the part of the teacher and the ability to present movements.

On the other hand the advantages of an open approach, especially when it comes to creating child-autonomy, experimental scenarios and opportunities to try out movements have been stressed. Consequently, physical education at preschool age does not have to decide for one model or the other, but it can combine both. Not only does this seem reasonable based on the mentioned aspects but also because of motivation. Finally this is in line with the fact that various types of learners exist among children which rules out a dogma of methods and calls for pluralism (Helmke, 2005; Horn, 2009).

Conclusion

There is a consensus in early child pedagogy, that various and varied experience of movement is indispensable for children in preschool age. Movement is what makes the child encounter and explore the world. Movement is what makes the child collect fundamental experience for the development of its personality and the process of learning. Since the beginning of the 1990s, the political and professional debate about the relevance of the process of early child education has given the topic worldwide significance and put it on the agenda. Hence - even though in different ways - the necessity of teaching movement can be found to be written down in many different curriculums for teaching (Fthenakis, 2007).

However, there are big variations in the way in which the teaching of movement is being realised. Variations are to find not only in the way in which the different kindergartens are being built - and hence are able to provide the necessary room for movement. There are also big differences concerning the designated timeframe for movement which every kindergarten offers to its children – including not only the time for instructed physical education but also free time for playing, in which the children design the way of their movement themselves

by playing games. A major reason for those variations is the question, what the available kindergarten-time per day is supposed to be used for.

Here lies a conflict of interests, since the task of generally educating preschoolers has to cover many aspects of education. Another reason for variety is the big differences of the didactical and pedagogical capabilities of the kindergarten teachers in terms of movement education. Adding to the latter is the situation, that groups of children are often very heterogeneous, concerning the individual movement-skills.

As a summary of the difficulties in the realisation of movement education, which are being caused by the mentioned factors, there is only one conclusion: there is still a lot of work to do.

In spite of these challenges, the study “Vorschüler in Bewegung” - carried out by the University College of Education Schwäbisch Gmünd - shows that it is definitely possible to establish and maintain a high level of quality in the physical education at preschool age.

In that study the authors are not only discussing the goals of movement education in preschool age. They are also offering various possibilities of how to design movement education in terms of content and methodology. Furthermore this research shows significantly positive results in the quantitative motor tests, for example concerning side jumps. Even more interesting and convincing are the results of the qualitative research (interviews with day-care teachers) which prove the positive effects of intervention concerning the development of personality and social competences. Further results can be obtained from the Ph.D dissertation of Peter Basic, which will be published in 2012.

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There Are Some Things We Learned -That We Hadn't Thought of:

Experience of and Learning in the Subject of Physical Education and Health from a Student Perspective

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Abstract

Physical education and health [PEH] is a popular school subject, but the aims and purposes of the subject are not so evident. How do the students experience the subject? In this study ten female students who passed their mandatory PEH program are interviewed regarding how they experienced the subject and what they learned after twelve years of mandatory lessons in PEH. The interviews are analysed using Merleau-Ponty's (1997) theory of the lived body. The results show that PEH is experienced as two distinct subjects: physical education and health education. The physical education part is mainly sport activities and is considered not serious, in comparison with club sports. Health education is taught as a theoretical subject and is rejected because theory does not belong to PEH. When the subject is taught in a dualistic knowledge tradition, the learning of PEH is neither theoretically nor practically satisfactory. The students vaguely suggest a more integrated approach to learning.

Keywords: physical education and health (PEH), student perspective, learning.

Introduction

Physical education and health [PEH] is a popular school subject.[1] The majority of students have a positive view of the subject. PEH is fun is a common discernment (Larsson, 2004; Meckbach & Söderström, 2002; Redelius, 2004; Sandahl, 2005; Skolverket [The Swedish National Agency for Education], 2005). The subject is dominated by an activity discourse (performing physical activities) and a social fostering discourse (cooperation and caring for one's schoolmates) (Quennerstedt, 2006). The students as well as the teachers have however problems defining the aim and purpose of the subject (Kirk, 2010; Redelius & Larsson, 2004; Skolverket, 2005). What is learned in the subject is therefore not so evident: 'Evidently there are learning processes and knowledge acquisition concepts that the students never or very seldom have heard about in connection with PEH' (Larsson, 2004, p. 133).

The students' experiences and their notions of the subject are important aspects that are not often researched (Dyson, 2006). Because "Physical education is defined by what is said, done and written in its name" (Kirk, 2010, p. 1), how students understand and interpret the subject is a valuable aspect of the subject. Their understanding might serve as a point of departure for developing the subject in a direction that increases students' learning (Larsson, 2004). Some of the findings that Dyson (2006) reported in his overview of the international research on the subject seem universal, such as physical education is fun, it provides a break from more important subjects, its purpose is to play, it teaches certain skills, and students do not have a clear understanding of the goals of different activities. Dyson (2006) also stated that, even if most students have a positive attitude, there is usually a group of students who do not appreciate the subject (Dyson, 2006; Larsson, 2004, 2008a).

[1] Sport and Health is the Swedish name of the subject but in this paper Physical Education and Health [PEH] will be used.

Background

Since elementary school was established in Sweden in the mid-19th century, PEH has been a compulsory subject both in mandatory and voluntary school. At that time, the main content of PEH was Linggymnastics and this very structured gymnastics exercised hegemony over the subject until the beginning of the 20th century. The movements in Linggymnastics were based on human anatomy, and every movement was described in detail. It was executed in classes of more than 100 students and was lead by command of the teacher. In the mid-20th century, Linggymnastics' dominance in the curriculum was replaced by that of sports activities (Blom &Lindroth, 1995; Lundvall, 2004). Sport was also the name of the subject until the end of the century, when it was changed to 'Sport and Health'. Studies show that the health aspect mostly occurs as physical activity and occasionally as theory lessons (Sandahl, 2005;Skolverket, 2005; Thedin Jakobsson, 2004). In national and local policy documents, the health content is constructed on a biomedical basis; a dualistic view of the body and a pathogenic view of health dominate (Swartling Widerström, 2005; Quennerstedt, 2006).

Parallel with the development of PEH as a school subject, the Swedish voluntary club sport organisation developed. After the Olympic Games in Stockholm in 1912, different sport activities became more and more popular. The establishment of the Swedish Sport Confederation [Riksidrottsförbundet] made it easier to establish new sport clubs first in the cities but later also in the countryside. Club sport spread all over Sweden. Today, sport is the most frequent leisure activity among Swedish children and youth (Peterson, 2000; Riksidrottsförbundet, 2005).

Sport activities have been the main content in the subject since 1962 and still are. To do sport activities is what students as well as PEH teachers prefer and expect of the lessons (Ekberg, 2009; Larsson, 2004, 2008b; Londos, 2010;

Sandahl, 2005). The Swedish Sport Confederation has also served as PEH teachers' in-service training (Annerstedt, 1991). Since the paradigm shift from gymnastics to sport, there has been a strong connection between voluntary club sports and the school subject (Londos, 2010). Olofsson (2007) summarized that "All in all this research survey shows that compulsory PEH teaching has been strongly influenced by voluntary (competitive) sports, both in Sweden . . . and in other countries" (p. 166). Schools also use sport to attract students, and some upper secondary schools have programmes on the national level for different sports (Eliasson, Ferry, & Olofsson, 2010).

The connection between club sports and the school subject, as well as the name 'Sport and Health' is both a strength and a weakness of the subject. Sport activity was the content in the policy documents from 1962. Gradually the commission of the subject has increased, the sport influence has decreased (Ekberg, 2009; Lundvall &Meckbach, 2008) and fewer concrete directives on what the subject should contain have been given in the national policy documents (Annerstedt 1991,1994; Jagtøien, Hansen & Annerstedt, 2004). The lack of directives has lead to a discrepancy between the directives given by the national policy documents and what actually happens in the lessons (Ekberg, 2009; Karlefors, 2010; Londos, 2010; Lundvall & Meckbach, 2008). PEH appears as an activity subject, with team ball sports as the principal activity (Carli, 2004; Ekberg, 2009; Öhman, 2007; Quennerstedt, 2006; Skolverket, 2005, Swartling Widerström, 2005) while it has a broader aim and content according to the policy documents (Ekberg, 2009; Lundvall & Meckbach, 2008). The subject has in Bernstein's (1977) terminology a weak classification and is affected by other agents (Lundvall & Meckbach, 2008) "mainly through a dominant sport discourse" (Ekberg, 2009, p. 79). This situation favours those pupils who are engaged in organised sport in their leisure time (Sandahl, 2005), called "the dominant ones" (Londos, 2010). The other group of students, with

little or no experience of club sport, is called “the dominated ones” referring to their respective influences on the lessons (Londos, 2010). The dominant ones are chiefly boys, which results in the girls’ interests being pushed into the background (Carli, 2004), and boys receive higher marks in the subject than girls (Redelius, Fagrell, & Larsson, 2009).

Despite the sport influence, PEH is a school subject and should be steered by national and local policy documents. However, there are several aspects in the organisation of the subject that separates it from the rest of the school (Karlefors, 2002). The subject of PEH is oriented more towards organised sport than towards school teaching (Londos, 2010).

Aim and Theoretical Framework

The aim of the study is to obtain a student perspective of the subject PEH and what learning the subject mediates. Ten female 17-year-old students have been interviewed about their lived experiences of PEH. The history of PEH, the biomedical dualistic view of the subject and the health content, and the connection to organised sport make Merleau-Ponty’s (1997) theory of the lived body a conceivable, interesting, and relevant theoretical approach. Merleau-Ponty (1997) denied the Cartesian view that the body is divided in two parts, the mind and the body, and argued that mind and body never can be separated. We always occupy our bodies, and we explore the world through our lived bodies while moving and using our senses. Moving and learning go together and are important for our existence and our learning. (Bengtsson, 2001; Merleau-Ponty, 1997; Torstensson-Ed, 2003). A movement, a skill, can be integrated into the lived body by repetition and a habit can be acquired.

> When a skill is acquired, a habit, or more precisely, a habitual field of practice is integrated with the own lived body. When the skill once is acquired it can be

> repeated with the same precision without thinking again and again. (Bengtsson, 2006, p. 124)

This habitual movement is both motoric and perceptual; it is both thought and body; it is the lived body as the conveyor of the life-world (Merleau-Ponty, 1997). A habit may also involve a 'thing', such as a bicycle or a ball. By repeatedly using it, a 'thing' can be incorporated into the lived body, a new habit is established and you do not have to think when using it (Bengtsson, 2005). To establish a habit is constituted by 'I can.'

Doing research of a lived experience implies looking for meaningful structures in the lived experience and trying to find the core of it (van Manen, 1990). The phenomenologist asks, "What is this or that kind of experience like?" (van Manen, 1990, p. 9). It wants to find insights into how a part of the world or a phenomenon has been experienced. This study will describe the subject of PEH with the help of ten female students' lived experiences. "The aim is to construct an animating evocative description (text) of human actions, behaviours, intentions and experiences as we meet them in the life world" (van Manen, 1990, p. 19).

The study is retrospective, which means that the interviewees describe experiences that are transformed into reflections when they answer the interview questions. The experiences are then processed by the researcher, who analyses them and communicates her/his results in a text (Bengtsson, 2005; van Manen, 1990). For this reason, the results cannot be generalised, but they can give us insights into how the subject of PEH can be experienced, understood, and interpreted from a student perspective.

Method

The students had completed their mandatory PEH programme at the time of the interviews. The ten female students have known each other since they were young. They grew up in the same village, attended the same schools, and played on the same sport team. Due to their common background, possible variations in their experiences can contribute to a multifaceted picture of the subject.

Even if all the informants are girls, no gender perspective is placed on the analyses. The subject of PEH is the phenomenon being studied based on the students' experiences of the subject and their learning experiences. Their experiences are consolidated in themes that emerged during the analysis (van Manen, 1990).

The interviews lasted about 60 minutes each, were semi-structured, and dealt with the interviewed students' experiences of club sport, physical education, and their views of themselves as physically active in a lifelong perspective. This article is about the part of the interviews that dealt with the school subject of PEH. The ten students have known the interviewer for many years, so the interviews were carried out in a safe atmosphere. The students were informed of the aim of the interview, that their participation was voluntary, and that they were able to stop their participation at any time if they so wished. They agreed to the use of a tape recorder. The interviews were transcribed and sent back to them for approval.

The analysis is based on Merleau-Ponty's (1997) theory and set of concepts and had two questions as the point of departure: How is the subject of PEH experienced by the students and what have they learned in the subject? The interviews were read through in order to find shared structures, 'themes' of the

subject PEH. When they were found, Merleau-Ponty's (1997) theory and concepts were used in order to analyse, describe and understand them.

Results

The interviewees express that the subject consists of two parts: one practical physical education part and one theoretical health education part. The results will be presented under these two themes "Experiences of physical education" and "Experiences of health education". The third theme is "Learning in Physical Education and Health".

Experiences of the physical education

The general consensus is that PEH is not like an ordinary school subject. It is more like a break: It is fun, relaxing and it is physical activity. A contrast to ordinary lessons where the pupils are sitting still and listen to the teacher.

> For one thing you get up from the desk, there's a lot of just sitting and reading and writing and drawing, and it's nice to get away and move when you've been sitting still . . . so it's nice that there's a lot of play in what we do, and it's nice to let go of school (Student 6).

Lessons in PEH are something outside 'real' school lessons: They are physical activities that are performed in fun but not in earnest. PEH is experienced as a necessary break in the school day that does not require a great deal of mental activity. PEH is intended to help students to concentrate for the rest of the day, according to one of the interviewed students.

As an activity, a break, the subject is experienced as important, even as the most important subject. The importance is however related to the physical activity, to 'doing' not to learning. The playfulness, the variation of activities, is a way to disengage from ordinary schoolwork.

> Precisely this, to be able to do something else, to get exercise and try new things, then we often have things like aerobics and Body Pump and such things. So there's after all good variation in the physical education. So I think PEH is fun (Student 5).

But the fact that an activity is fun does not self-evidently imply that a student likes to continue with that activity outside school. "Yes, I think climbing was rather fun, but I would never manage to start doing it" (Student 9). Something more 'than fun' is needed in order to continue a fun activity outside school.

The interviewees regard themselves as physically active, although only the four who are still active in organised club sports devote themselves to regular physical activity outside school. While PEH is just fun for the interviewees, they think that PEH is really important for students who do not get much exercise in their leisure time, the dominated ones (Londos, 2010). The dominated ones need to learn sport, need to be physically active to stay healthy and avoid obesity.

> Because it's good for young people, for those who are not active in their leisure time. And it is good, it's not only learning to have ordinary lessons but having sport, so they can learn things about sport and run and . . . . (Student 10).

The activity discourse is dominant in our interviewees' expectation of the subject. They stress that PEH as physical activity is important during the school day, but they are not aware that daily physical activity is recommended in the policy documents in addition to lessons in PEH. The subject PEH should and could be something more than just physical activity. The aims and purposes of the subject as they are expressed in the policy documents are not steering our interviewed girls' expectations of the subject.

The physical education part of the subject is mainly sport activities. Sport activities come naturally to these interviewed girls, who have spent many hours in their younger years playing sports. The interviewees use the skills they have learned in sport clubs to have fun and this is not considered serious. The physical activity conducted in club sport, learning these skill, is however described as serious.

> R: The basketball training is a hundred times more serious.
> I: And what does it mean that it is more serious?
> R: It's probably partly that I pull myself together, because this is my team and it's us together, so we must get better. But in physical education I feel that now I just want to have fun.
> I: But having fun, that's not serious?
> R: Yes, but you don't really train everything properly, that you go through it, that you train how to play volleyball. It's not like you drill things correctly and then. . . .
> I: And that's what is serious, that you train baggers, but you play volleyball.
> R: Yes. (Student 7).

So, at the same time as the interviewees have a clear expectation that the PEH lessons should be playing and having fun, it is these expectations that cause the subject to be experienced as not serious in comparison with club sports.

> Physical education is not so serious; if you play basketball the teacher doesn't go through it. If you make a wrong shot, for example it's not the worst thing. The teacher says, perhaps you should shoot like this. But if you are training basketball, you must shoot right (Student 8).

The student expresses that the teachers' and the leaders' instructions are different in PEH and club sport. The same activities are used, but what to achieve is more evident in club sport for these students. This distinction seems to cause the subject to be experienced as not serious in comparison with club sport.

Experiences of Health Education

The part of the subject that consists of health education is mainly theoretical, and that part is not appreciated. There is enough sitting and listening in the ordinary school day. From the pupils' point of view, health education is a disappointment:

> R: Because we sit there and listen to a teacher as if it was an ordinary lesson and that's what isn't fun. We want to be there practising sport, doing ball games or whatever, but if we sit down on a bench and listen. . . .
> I: It's not the learning in itself but that you have to sit down and listen just as you do all other hours all other days?
> R: Yes, that it doesn't feel like an ordinary PEH lesson (Student 10).

The way the health education is structured does not correspond to the students' expectations of PEH. Health education resembles ordinary school work with lectures, homework, and tests. Inactivity, theory, and exams do not exist in the students' conceptions of PEH, which makes them adopt a negative attitude towards the health content. They object to the written tests: "Tests of ergonomics and things like that, which are completely unnecessary in my opinion" (Student 9). It is the inactivity, not the content in itself, to which they object. To integrate the theoretical content with activity is a suggested solution:

> R: It is that they have put something theoretical in a practical subject. . . .
> I: Could they do it in some other way then?

R: Well, we could have done the exercises although we were moving, we could have talked and then do the things (Student 3).

The interviewees emphasise that physical activity is good for their health and for this reason they think it is contradictory that they must sit still and be told that they should exercise to improve their health.

Health education is described as theoretical lessons and in this sense it resembles ordinary school work. But, whereas ordinary school work is important, health education is not. Theoretical content does not fit the interviewees' expectation of PEH. Theoretical content belongs to the 'real' subjects, and PEH is something else. This distinction the interviewee's does between ordinary school work and PEH seem to cause the subject to be experienced as not serious in comparison with the ordinary school.

Learning in Physical Education and Health

All learning requires content, and the content that is described is that which the students are already familiar with. They do not think that they have learned anything new in the PEH lessons. "I don't think we have learned very much in the PEH at school. There is a lot we know already. It's after all fairly simple, what we do in physical education" (Student 4). In the upper secondary school, they are sometimes allowed to choose activities, and then the interviewees choose ball games, an activity to which they devoted themselves for many hours during their childhood and adolescence. The activities are described in terms of 'trying out'; there are no demands for learning anything special.

I: What do you learn in a PEH lesson?

R: Things like running, playing football, then we have some lessons in ergonomics and about the body, the pulse and lots of such things. I don't really

> think it prolongs one's life. I don't think it's terribly important. Most of what you learn in a PEH lesson you know already (Student 8).

Learning is diminished. Some think that they would have learned more, if, when choosing activities according to interest, they had chosen some other area with which they were not as familiar as ball games.

> But if I had chosen something else, there is one that is called music and movement, where there is a lot of dance. If I had chosen that, it would have been entirely different. It was something I didn't know before (Student 4).

Some students describe how they learn new things when trying out new activities. But when choosing activities with which they are already familiar, they do not experience any learning. The subject is also experienced as roughly the same over time from elementary to upper secondary school, and they cannot describe any clear progression.

In line with the rejection of the theoretical health content, a general opinion is that physical activities are learned by being physically active.

> I think that physical education is not a subject you should have to sit and swot away at. Sport should be learned physically by learning to play football or to swim or to play badminton or massage or whatever you want to call sport. But not by sitting at home and trying to learn the best way to warm up. You can learn that by warming up. . . . I think that sport should be practised physically; it should be a physical activity at school (Student 2).

Physical learning is based on natural instincts, unlike other learning, which requires a great deal of mental activity.

> Of course you must think in order to play football too, but it is more about utilising natural instincts when practising sport than when doing arithmetic or when acting (Student 2).

The interviewees separate the body and mind when talking about learning in PEH; at the same time, they are aware that learning a new activity requires thinking. In the PEH lessons, they would rather not perform any mental activity. They chose to play ball games in their choice of activity according to interest, an activity with which they are familiar and about which they do not have to think in order to implement it; they can just enjoy it. Or, as one the interviewee puts it:

> If it's something new you have to learn, you think about how much you have to go at it and such things, but if it's something you have done several times, you don't think about it. Then it is like instinctive: You don't think so much, I don't think about it in the same way (Student 4).

Theoretical health education, where they have lectures, homework, and written tests is not appreciated. The use of tests can be seen as a way for the teacher to help the student to consolidate the knowledge, but the result is the opposite. The students study for the test and afterwards they forget it.

> Well, you learn, but most of it is swotting for a test to make a good result. No, I hardly remember anything about that. I always swot for it and then it sort of disappears (Student 9).

One of the interviewees stated however, after a second thought, that the tests are part of the learning of the subject, even if it is difficult to explicitly tell what is learned.

> Well, at the same time those tests and what we do. I can't say it's bad, for I've learned something from it too, how to lift and things like that. Maybe I'll take back that it was bad, because I probably think it's fairly good to have it. (Student 3).

Learning sport skills and sport activities are not emphasised in the national policy documents. But using the skills, the integrated bodily patterns the students already have, could be a tool to enhance learning and a way to achieve a specific aim in line with the curriculum.

> I: If I ask what you aim at in physical education, do you know what goals you have to meet for a pass with special distinction, for example?
> R: Yes, we have a lot to do with theory, handling stress, we have to train lifting, ergonomics—so there are lots of things in that. In the lessons we don't have such an organisation, so today we must do this. And after the lesson the teacher asked what was the goal of the lesson and why did we do this and what did you think of it and so on. So there is after all a serious organisation . . . so there still is some idea behind it at any rate. (Student 1).

Informing the students of the aim of the lesson can, even if the aim is vaguely perceived by the students, enhance their experience of seriousness.

All of the interviewees are anxious to retain the activity parts of PEH. They separate body and mind when talking about learning at the same time as they describe that combining the two is needed when learning a new skill or learning the theoretical health content. The lack of integrated learning might be a reason for this interviewee's summary of the learning in PEH: "Maybe we don't learn a hell of a lot in a PEH lesson" (Student 8).

On the other hand a few of the interviewees say, after second thought, that they have learned something during their PEH lessons. Still, they have difficulty giving concrete examples: “But at the same time in ordinary PEH there are some things we have learned that we haven’t thought of “(Student 4).

Analysis and Discussion

The students’ description of PEH as a fun but not important subject in which sports activities dominate the content and health education is the theoretical content has been confirmed by other studies nationally as well as internationally as described in the background. But how can we understand these experiences? What is it that the interviewed students are really saying about the subject of PEH and what they have learned?

According to the students’ experience PEH is taught in two separate parts. A practical part mainly consisting of sports activities and a theoretical part consisting of health education. The way that the subject is understood in the students’ narratives can be referred to a dualistic knowledge tradition that is known from the subject’s history and tradition. The separation of intellectual knowledge from the bodily/practical knowledge (Molander, 1997), has existed in the subject ever since P. H. Ling’s days (Ljunggren, 1999) and still exists in the national policy documents (Swartling Widerström, 2005).

Each of the two parts of the subject is compared with two important societal phenomena: organised sport and education. The students have a long, chiefly shared, experience of education, physical education, and organised sports. When they attend the PEH lessons, they are, due to their participation in club sports, well familiar with the gym, its fittings, its design, and the activities for which the gym is intended. To be physically active is also their expectation when they attend the PEH lessons. When they can use the skills they have learned in club

sports in PEH lessons, they can just enjoy the activity. They experience the subject's intrinsic value through the physical activity (Engström, 2010). By means of Merleau-Ponty's (1997) concepts, they use the habits they have developed in the club sports to play in a joyful manner in school, together with students who have developed the same habits. They experience their lived bodies, and this experience creates the feeling that Merleau-Ponty (1997) called 'I can.' From the perspective of life-world phenomenology, this feeling has value in itself and could be used to further explore the life-world. But the students have no words to express this feeling, and their education does not provide them with any. They have probably not experienced much talk about learning during their PEH programs (Larsson, 2004).

The students compare their experiences of the physical education part of the subject, with their experiences of learning skills in club sports. In club sports, they are trained in a practical pedagogical situation in which a specific skill is to be incorporated into the lived body, to use the words of Bengtsson (2006). By means of Merleau-Ponty's (1997) concepts, the pupils' experiences in club sports may be described as widening of their life-world: The ball is successively incorporated into the lived body during the training, and new habits are continuously established.

During physical education, they use these habits; but most likely with another aim than training new skills. The aim of the physical activity in PEH is however not clarified or not perceived by the students. They experience their lived bodies, and that is fun, but they have no words and knowledge to interpret this experience. They also feel that the demands of their performance is low and the instructions from the teacher do not enhance their performance. All together, in the comparison with club sports, PEH teaching appears not to be serious, whereas the skill training is conducted in earnest. The feeling of 'I can' is

reduced to a feeling of pastime and recess. This conception, which these students express, is problematic, however, because they may be said to represent "the dominated ones" (Londos, 2010), When the dominant ones do not conceive of the subject as serious, then who does?

The theory, homework, and tests in health education may be seen as an attempt to transfer the subject from the practical to the theoretical knowledge tradition (Molander, 1997). Health education is designed as a "real" school subject (Thedin Jakobsson, 2004). The students' expectation of PEH as a practical subject is, however, an obstacle to the successful teaching of health education. The students listen, read, take the tests, and then forget. The content is not embodied. However, they express fairly unreflectingly a wish to use their lived bodies in the health education, a process that Bengtsson (1997) has designated as 'a thinking body'. They express a wish to use both body and mind as an integrated learning experience (Swartling Widerström, 2005) when they learn a theoretical content. It seems as if the students' experiences instinctively tell them that the thinking, lived body is necessary when learning something new physically as well theoretically, but they cannot develop these experiences any further.

The aim of the study is to get a student's perspective of the subject of PEH and what learning the subject mediates using a life-world phenomenology approach. The analysis of the interviewees' experiences shows that PEH has difficulty in upholding an identity of its own in comparison with the activities in organised sports and the rest of the curriculum. When the subject is regarded in a dualistic knowledge tradition, in which body and soul are separated in the learning and bodily activity is subordinated to intellectual activity (Molander, 1997), teaching PEH is neither theoretically nor practically satisfactory. The theoretical teaching is not embodied, and the embodiment of the practical teaching is not theorised.

Bengtsson (1997) argued that it is a pedagogical problem that the pedagogical practice cannot unite cognitions, physiology, and physical behaviour in teaching. If pedagogical practice in PEH was to be based to a greater extent on an integrated view of knowledge and learning, the interpretation of what is happening in the gym might be different. The situation can also be regarded from the subject's history and tradition. It is characterised as a subject with a weak classification, allowing other agents outside school to influence the subject, such as sport clubs (Lundvall & Meckbach, 2008), and it has also been characterised with a strong classification towards other school subjects (Karlefors, 2002). What would happen if the subject had a weak classification towards other school subjects and strong classification towards club sports? It is of importance to clarify the aims and purposes of the subject to clarify and make visible the difference between the aims and purposes of club sport and the school subject PEH.

According to the latest report on PEH from the Swedish Schools Inspectorate (Skolinspektionen, 2012:5), didactical considerations need to be developed in the subject. Tinning (2012) was surprised that, despite variations in what stands for physical education across national borders, the form of its survival is remarkably similar across countries. Maybe this is due to the subject's resistant to change (Kirk, 2010). One suggestion for improvement is to increase the awareness of the lived body and the need for a more integrated learning in PEH. Because the subject has to develop and change in order to survive. It is not satisfactory that it is regarded as a fun break among other more important school subjects. Kirk (2010) envisioned three scenarios for the subject in the future: *more of the same*, *radical reform*, or *extinction*. Listening to students' voices will most likely not result in radical reform, but hopefully it can help to avoid the subject's extinction.

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Sports Supplements: Strategies and Policies

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Abstract

Given a context in which athletes seek performance enhancement within anti-doping provisions, this article discusses the role of sports supplements in performance enhancement. It does so both by developing an ethical point of view, and also by suggesting practical policies and strategies for athletes and their advisers. Firstly, we describe different kinds of purposes for taking sports supplements, while identifying those that are ethically problematic. Secondly, we discuss some ethical and technical problems that may arise in the use of sports supplements. Thirdly, we suggest some strategies towards effective supplementation and the avoidance of ineffective and problematic substances.

Keywords: sports supplements, doping, ethics, policy

Introduction

To begin with, we shall stipulate some terms. The provision of arguments to justify these stipulations would require a separate article (which has recently been submitted for publication). There, we recommend the use of the concept of 'sports supplement', rather than 'dietary supplement' or 'food supplement', since both terms are inadequate and misleading in the sports context. We suggest an account of sports supplements based on three conceptual criteria – additionality, concentration and functionality – enabling us to arrive at a five-fold categorisation of sports supplementation: adequate food, additional food, sports supplements, medicines, and sportsdope. This account also enables us to define sports supplements as 'concentrated additional sources of nutrients and other substances used in order to enable, support or enhance sports participation and performance, excluding drugs (both medicines and sportsdope)'.

Here, in this article, we shall firstly describe different kinds of purposes for taking sports supplements, and identify those that seem to be ethically problematic. Secondly, we shall discuss some ethical and technical problems that may arise in the use of sports supplements. Thirdly, we suggest some strategies and policies towards effective supplementation and the avoidance of ineffective and problematic substances.

Sports Supplements – ethical issues

Given our definition of sports supplements, and our five-fold categorisation of sports supplementation (adequate food, additional food, sports supplements, medicines, and sportsdope), sports supplements may be seen as nutrients that come somewhere between food and drugs (both medicines and sportsdope). The main distinction borne in mind by athletes is obviously doping/non-doping, since this determines their participation in sport within or outwith the rules. Since the basic and most generally accepted argument against doping is quasi-

legal (i.e. simply that it is against the rules), it might be thought that anything within the rules, such as 'supplements' of various kinds, would be ethically unproblematic. However, a closer look at sports supplementation reveals a range of further issues, which we shall begin to explore by examining sports supplements in terms of the purpose of their use, highlighting the ethical issues.

Our basic line follows the therapy/enhancement distinction: if sports supplements are used for maintenance or health purposes (sustaining and/or compensatory and/or restorative), they are more like food, therapy or medicine; but if they are used strictly for performance purposes (enhancing), they are more like doping. Although there may be overlap in the area of the therapy and enhancement, this does not mean there is no distinction to be made at all.

In anticipation of two objections: (a) we are aware that there are those who deny that a therapy/enhancement distinction can be sustained (for example, see the discussion in Daniels, 2000; Resnick, 2000) – but we disagree, as with Morgan (2009) and President's Council on Bioethics (2012). (b) we acknowledge that it may be difficult to draw an exact and unambiguous line between therapies and enhancements – but this doesn't mean that there is no distinction to be drawn – only that such a distinction is problematic. However, it is precisely this indeterminacy that provides the ethical challenge.

To continue: we should firstly notice that the term 'enhancement' actually covers both of the above cases, and is ambiguous here. All therapy is (also) a kind of enhancement – if it did not make you better, it would not be a therapy! So, 'enhancing' could mean 'compensatory/restorative' – that is, supplements 'enhance' the athlete by

- compensating for temporary medical incapacity (like iron for blood loss) or a more permanent medical incapacity (like calcium for conditions involving gut-malabsorption) or
- restoring one's powers (like paracetamol for a headache) or
- guarding against a possible dysfunction (like salt for cramps) or
- protecting against an environmental threat (like anti-oxidants against poor air quality).

These are supplements that allow the best 'me' to attend and compete at present – they enable and/or support my best performance on the day.

Alternatively, 'enhancing' could mean 'base-line performance-enhancing' – that is, supplements that aim to enhance my capacity to produce better performances in general and in future. These are supplements that aim to produce a better 'me'.

Now we can apply these observations as follows:

(a) Adequate and additional food. Athletes need to supplement their 'normal' food intake in order to support their extra activity, which is greater than the average non-athletic person. We are aware of problems with the concept of the 'normal'. To begin with, as we have implied, the athlete is statistically abnormal, on any scale that includes the whole population. And within the category of athletes, each athlete is an individual, such that what is 'normal' for each will vary. So, we are talking here about the normality only of athletes, and the measure of normality is individualised. We rely on the therapy/enhancement distinction as applied to individuals, to indicate what is 'normal' for the individual, which forms the basis for ethical decision-making. This is consistent with WADA's criterion for the granting of Therapeutic Use Exemptions: "...

would produce no additional enhancement of performance other than that which might be anticipated by a return to a state of normal health following the treatment of a legitimate medical condition" (WADA, 2012b, p 14).

Now, some athletes supplement their 'normal' food intake just by revising their diet so as to ensure that it is adequate – that they are eating the right kinds of food – and some do it with additional food. In many sports, athletes consider that they do not need to use sports supplements. For example, long-distance runners and cyclists, tennis players and footballers, take on extra water because of the dangers of dehydration, and extra calories because of the large quantities their bodies use and lose. However, some athletes must also take supplements, since taking additional food to meet the demands of their sport would mean taking massive quantities of ordinary food. For them, such supplementation is inevitable and ethically unproblematic. Nevertheless, athletes need to ensure that using food supplements does not mean compensating for a poor and inadequate diet.

Simple as it may seem, 'food' is no idle category. Athletes tend to underestimate the importance of food, searching for something 'better': "Most athletes, even serious ones, are so serious about athletics to even take the time to eat properly. The reliance on sports supplements and drugs is so obvious that it is down right disappointing" (Boone, 2010, p 1). One problem here is that the supplement provides a 'pure' form of the desired ingredient, whilst its desired qualities might well be a function of its action only within its particular food context.

(b) Some athletes have health problems and they need to use sports supplements or medicines to address them. For example, an athlete may need to take iron for anaemia; or insulin for diabetes. It is the duty of athletes to be at their best on the day of the competition. If that means taking a supplement or prescribed

medicine to maintain capacity to train or perform, this does not seem unfair. Similarly, the World Anti-Doping Agency (WADA) (2012b) recognizes rule-governed Therapeutic Use Exemption in the case of legitimate medical need.

(c) Some athletes, or athletes in some sports, have particularly heavy training or competitive demands, such that it becomes important to take sports supplements to maintain the capacity to train and to perform. In the case of compensatory or restorative use of supplements, there does not seem to be any objection. If that means, for example, taking a vitamin E pill (an anti-oxidant) for protection from free radical damage, then, in the absence of further objections, this would on the face of it seem unproblematic.

(d) In the case of base-line performance-enhancing supplements, however, athletes take supplements for much the same reasons as some athletes take drugs, and they may be similarly willing to risk their safety and their health, and inadvertently to test positive for doping. In addition, despite the fact that supplements are not illegal, and even if they were shown to be safe and unharmful, there is the suspicion in some minds that taking them alters the conditions of the contest in favour of those who can afford them, who are prepared to take them, and who are able to gain benefit from them. This constitutes an extra element of unfairness in the contest – an unfair advantage – that the supplement-taking athlete is quite prepared to accept for himself.

Here, the difference between sports supplements and sportsdope, that is crucial for the athlete, is blurred. Athletes who do not want to cheat (for example, by taking some substance against the rules) sometimes seek to gain the supposed benefits of doping whilst evading the anti-doping rules by using substances that are not actually banned.

An example of a substance that enables this is, for example, creatine, which has a reputation for helping muscles to work harder for longer and for improving recovery time. We read about the use of it in different sports – football, gymnastics, ice-hockey, wrestling, boxing, etc. We might give as examples the Manchester United midfielder, Darren Fletcher (Moody, 2011) and the tennis player Novak Djokovic (Cooke, 2012), who are reported to have used it for training purposes. Glenn Hoddle, the former England football manager, both used it as a player and condoned it as a coach (Warshaw, 1998). These athletes used creatine in order to obtain the enhancements and advantages supposedly conferred by steroid usage, and they chose creatine because it was not on the banned list.

However, the extent of creatine use is an excellent example of the lack of accurate information as to benefits and risks. To begin with, as all authorities now acknowledge, creatine provides only very specific benefits, for very specific elements of sports performance, under very specific accompanying training regimes. This ensures that the vast majority of creatine users do not fall into the category of possible beneficiaries, although aggressive marketing ensured that sales in the US alone approached $500m in 2011.

Secondly, there remains some controversy over possible harms. For example, some epidemiological studies showed a high risk for ALS (amyotrophic lateral sclerosis, also called motor neurone disease – a rare and devastating neuro-degenerative disease of unknown aetiology) among elite Italian footballers playing 20-30 years ago, and creatine use was identified as a possible cause (Belli and Vanacore, 2005; Vanacore *et al*, 2006). Although Armon (2007) has questioned the methodology of such studies, and most authorities now accept that creatine is probably harmless in adult use, this example illustrates that

athletes may be prepared to risk using a substance that some authorities believe to be possibly harmful, providing that it is not banned.

Thirdly, even if there were no demonstrable harms, there may still be side-effects. Amongst those cited for creatine are the development of muscle cramps in hot or humid conditions, and the additional stresses imposed upon the body by potential weight gain, which may result in muscle strain or other musculo-skeletal stress. Thus, any such supplementation must be accompanied by watchful awareness.

Fourthly, it is not just elite adult athletes who use creatine, but also many young and non-elite athletes (McDowell, 2007). In some tackle sports, for example rugby league in England, players as young as 15 routinely move on from protein shakes to creatine, in order to 'bulk up'. Since (for obvious reasons) the effects of creatine on young and growing bodies are uninvestigated, we cannot know the risks involved – but the legality of creatine is often mistakenly taken as an indicator of safety.

A clear example of someone seeking the performance advantage is Richard Quick, a swimming coach who sees himself as "on the cutting edge of what can be done nutritionally and with supplements", seeking to maximize supplement efficacy. He is quoted as claiming that his athletes can do "steroid-like performances", trying to "keep up with the people who are cheating without cheating" (Sokolove, 2004, p 53). Notice that the meaning of cheating here is given solely in terms of what the rules currently say or do not say. If some substance does not appear on the banned list then, for a coach such as Quick, there would presumably be no reason not to use it.

Our line, however, is that, whilst it is within the rules, it is still ethically questionable to take supplements for base-line performance enhancement reasons, because this shares some of the risks and dubious motivations of doping. It might be seen as a slippery slope to doping, reducing sporting values to mere, and cynical, rule-following.

What is important, from the ethical point of view, is not so much the actual supplement the athlete takes, but the reason why he or she takes it. It is about the attitude the athlete has towards the sport he or she is participating in – about a concept of fair play that goes beyond rule-adherence. The idea we have of sport is that it is a contest between athletes to determine which has the better skills and abilities that are to be tested – and for this test to be a fair one, the same circumstances are necessary (see Lenk, 2007). This means that supplements outwith the WADA list should not have the capacity to base-line-enhance the performance of athletes, or at least at only a very low level.

If there are indeed legal substances that can enhance sport performance as well as steroids, we wonder why more athletes are not using them. Either they do not believe in their efficacy or safety, or they have some ethical reservations. It is also unclear why they are not on the 'WADA list' if there is sufficient evidence that these supplements enhance performance similarly to some other prohibited substances. In defence of WADA, it might be said that these supplements are at least available widely and legally, and that any unfairness is no worse than already existing unfairnesses.

Problems of sports supplements

However, even if athletes use sports supplements just with the purpose of compensation or restoration in mind, there are still problems to be considered, both ethical and technical.

Choice of supplement

Deciding what kind of supplement to take is not a simple matter, given the wide range of sports supplements available on the market accompanied by attractive advertisements, and the huge number of 'research' studies describing their effects and making recommendations to athletes. However, the choice is difficult not just because of the large number of substances on offer, and competing claims and recommendations, but also because sports supplement usage raises ethical issues of safety and possible harms, deception, and informed consent, and these ethical issues are accompanied by technical problems, such as the following.

Guarantee of the quality of substance – fraud

The first technical problem for athletes and their advisers is that, because supplements are not drugs, they are not subject to the same rigorous testing and monitoring of production procedures, and so we cannot be confident of either their composition or their effects.

Maughan (2005, p 883) offers a caveat and a conclusion: "Some supplements contain excessive doses of potentially toxic ingredients, while others do not contain significant amounts of the ingredients listed on the label. … Many of these supplements confer no performance or health benefit, and some may actually be detrimental to both performance and health when taken in high doses for prolonged periods." So our first problem lies in ensuring that the advertised substances are present in the advertised quantity.

Guarantee of quality of substance – contamination by substances from 'WADA list'

Despite initiatives by the European Union to tighten up procedures, there are still no binding regulations for supplement manufacture and supply. The second

technical problem, then, and one that has produced a large number of positive dope tests, lies in inadequate production procedures resulting in possible contamination with a banned substance. For example, British tennis player Greg Rusedski tested positive for nandrolone, a performance-enhancing substance on the WADA banned list, but it turned out that it had been present in a contaminated supplement supplied by his professional association, the ATP (the Association of Tennis Professionals) (Bose, 2004).

In order to be safeguarded, we need to know that the substance is pure, and we need to guarantee non-contamination. This is not a simple matter. Studies suggested that 15 to 20 percent of supplements were contaminated with products that are not declared on the label, but that are on the 'WADA list' (e.g. Maughan, 2005, p 883; Striegel e*t al*, 2005, p 723; Baume *et al*, 2006). Aware of this fact, the British Olympic Association issued the following position statement on its website: "UK athletes are strongly advised to be extremely cautious about the use of supplements … strongly advised not to take supplements" (British Olympic Association, 2009).

We should mention here examples of both accidental and deliberate contamination. In the former, the problem may rest with the raw materials used, or with the manufacturing process, or with inadequate testing, or with unreliable suppliers. The classic example is of a supplement made with the same equipment previously used to make a steroid. The athlete takes what he or she thinks is the supplement, and tests positive for the steroid. In the latter, the motivation of the manufacturer might be to bring about an actual ergogenic effect (so that the product really is felt or seen to 'work'), or to bring about another effect so as to make the athlete think that the substance is actually working (for example, a little added amphetamine to give an immediate buzz).

Efficacy of the substance

However, assuming that we do have the actual 'pure' substance, and not some fraudulent or contaminated version of it, this still does not get us out of the woods. One big question still remains: how do we know that a particular supplement is ergogenic (i.e. improves performance), inert, or ergolytic (i.e. reduces performance, or is detrimental to health)? The problem here is our ignorance: there is very limited reliable research evidence one way or the other. For example, take a very commonly-used supplement – anti-oxidants. We do not even know much about the many different individual anti-oxidants to be found in various foods, and how they function within their food context. But athletes consume them in tablet form, in isolation from their food context. We do not know whether this might alter their effect, either to render them inactive, or to produce detrimental side-effects, or to increase their benefits.

Furthermore, typically, neither do we have any account of the possible interactions between various supplements being consumed nor, in very many cases, any account at all of the possible interactions between them and any nutrients or drugs also being consumed. For example, many people trying to reduce their cholesterol levels are also dieting to lose weight, and might eat grapefruit. However, it has recently been discovered that grapefruit should not be eaten when taking cholesterol-reducing drugs (statins), because it interferes with a liver enzyme – and so prescribed statins are now issued with health warnings against grapefruit. How many other apparently improbable dangers are there, in the combinations and interactions that we set in motion, that we presently know nothing about?

Our levels of ignorance ensure that many decisions about what to eat or use for the best are taken on very inadequate empirical grounds – partly because our knowledge is limited at the macro-biochemical level; and partly because we

know so little about ourselves and our individual, particular microbiological responses. We are each different, and our bodies respond differentially, as anyone will know who has had to diet seriously – often it is a matter of finding what will work for oneself. This means that many of us (and, of course, many athletes) are conducting physiological experiments on a population of one: ourselves.

So: very often, recommendations regarding sports supplements are made without adequate knowledge or evidence of efficacy, sometimes in response to advertisements or anecdotal recommendations, sometimes because a particular substance is currently fashionable, and sometimes in the spirit of "if it does them no good, at least it will do them no harm". (This point, and some material above, first appeared in Martínková and Parry, 2011.)

Adverse effects

However, even if there were no effects that were actually harmful to health, there may still be other important adverse effects. For example, the most common adverse effects reported to be associated with creatine include fluid retention and weight gain, and these effects may actually be detrimental in some sporting events (Ambrose, 2004).

Also, Maugham *et al* (2007, p 111) emphasize concerning ergogenic supplements that "it is increasingly recognized ... that responses to supplement use may differ between individuals depending on nutritional status, training status, and genotype." So any coach advocating or supplying creatine takes risks with regard to the athlete's health and with regard to performance detriment.

Strategies

From the above discussion, we can distil some recommendations that we think will be useful for the deliberations and decision-making of the athlete and coach (see also Martínková and Parry, 2011). We can distinguish two approaches towards strategies and policies for the usage of sports supplements, one leading towards education and responsibility, and the other towards even higher technologization of sport.

Education and responsibility

Given the above problems, it is clear that athletes should exercise caution over which substances they use, and should take responsibility for substance choice. A wrong choice might determine their placement in the race, or even their participation as such. And, after all, it is the athlete who will suffer for any mistake, or poor choice, or any sanction following a doping infringement.

The first issue for the athlete is to decide whether sports supplements are necessary, or whether they can be avoided. The important questions to be asked here are:

- Are the supplements to compensate for an inadequate diet? If yes, it is much safer to try to improve one's diet – even though even here one has to be careful, too, as to whether there might be performance detriment (e.g. hidden allergies to some nutrients) or contamination with substances from the 'WADA list' (as with meat in China and Mexico, and also when consuming large quantities of liver) (see The Associated Press, 2011).

- Are the supplements meant for base-line performance-enhancing? If yes, the athlete puts herself at risk, similar to the risks that dopers take, because those who seek effective performance enhancement are those most at risk of

contamination. In addition, such an athlete might rethink her motivations for sports participation, in terms of fairness to others, instrumentalisation of the self, etc.

- Which sports supplements are suitable for the athlete?[5] What is the scientific or clinical evidence on the same population of athletes? (Some experiments on dope and supplements have been conducted on non-athletes, or on non-elite athletes, or on athletes in different sports, which compromises the validity of the results for the population relevant to the coach.) What are the specific and non-specific effects? What is the effect on the athlete? Do we know enough about levels? (Can one overdose on them?) Do we know enough about combinations? (With other supplements or foods.) When is it most suitable to use it? (At what time of day or stage of the training cycle.) Is there a placebo effect? (And does this raise issues of deception?) Is anyone looking at the nocebo effect? (i.e. when one feels worse having taken it.) Is the usage not going to harm the athlete?

However, this issue does not concern only the athlete, but also the coach. Ethical issues that a coach should consider include the following: exploitation, fraud, consent, health, safety and athlete protection, awareness of exploiting and fuelling an athlete's insecurity, desire to win, dependency on the coach, etc. Also the coach should support governing bodies in devising systems for safe supplements. Thus there are further questions to be considered as well as the above:

- Am I ready to take responsibility for advising athletes concerning sports supplements? Do I know enough about the effects of the sports supplement in question? Does the athlete know enough about it, so that his or her consent

for using it is fully informed? Is it susceptible to contamination? Is the source of the specific sports supplement reliable?

A study by Petróczi et al (2007) concludes that there is an 'alarming' incongruence between athletes' reasons for supplement use and their actual use. "Athletes seem to take supplements without an understanding of the benefits they can offer, or the side effects. With the exception of vitamin C and multivitamins, less than 50% showed congruence between reasons and actions (supplements taken) suggesting that supplements may be used by high performing athletes without a clear, coherent plan". This is indeed alarming.

Plans for nutrition, supplementation, enhancement and doping can be so comprehensive and elaborate that, from the point of view of the athlete, it can be difficult to see where one begins and the other ends. Often, the athlete's diet is designed by a team of support staff, to which the athlete submits. Even some 'clean' athletes take a cocktail of pills that they hope will compensate for the supposed advantages of the banned substances taken by the cheats who risk detection. Greg Rusedski, the British tennis player, took such a cocktail every day (Hart, 2004), with a detailed and systematic diary – and we should assume that this is the rule rather than the exception amongst elite athletes, many of whom tread a fine line between the legal and the illegal. This imposes a tremendous responsibility on the whole team involved in these matters – especially those charged with duties towards athlete care.

Of course, it is not just about the responsibility of the athlete, the coach and the team. Butcher (2004) notes the duties of other subjects involved in this process of reducing or minimizing the risks faced by athletes, and the 'tangled responsibility' that results in ethical requirements of all stakeholders, as follows:

The supplement industry bears responsibility for consistently good manufacturing processes and quality control. It should also ensure honesty in description, giving reliable information (accurate labelling), and making claims to efficacy only when supported by evidence. Sport scientists should avoid prejudicial relations with the industry in order to preserve their objective status. Collusion with sponsors and apparent endorsement of products bring risks of bias. Governments must consider the dangers of an unregulated supplement industry, but also the needs of athletes subject to government mandated doping controls. Sports authorities should be looking for a co-ordinated system for safe supplements.

Policies

WADA as well as some governments advise athletes to be extremely cautious about the use of supplements and recommend their use only when necessary. This can be seen from the web-pages that give information to athletes, for example, the Australian Sports Commission (ASC) (2012) and the Netherlands Security System Nutritional Supplements Elite Sports (2001-12).

Australian Institute for Sport – Supplement Group Classification System

The ASC, through the Australian Institute for Sport (AIS) has developed one of the most comprehensive, well-researched and practically useful guides to the use of supplements for athletes and coaches (see ASC 2012). Significantly, it includes a section on food and cooking, emphasising the importance of basic nutritional supplementation through foodstuffs. In the AIS Sports Supplement Program, supplements are classified into four groups according to their effectiveness and safety:

Group A Supplements are sports foods and supplements, such as sports drinks and confectionary, caffeine, creatine, whey protein, iron and calcium

supplements, and electrolyte replacement. The AIS supports their use in specific situations in sport and provides them to AIS athletes for evidence-based uses. They are supported because they provide a useful and timely source of energy and nutrients in the athlete's diet, or have been shown in scientific trials to benefit performance, when used according to a specific protocol in a specific situation in sport.

So: these supplements are those about which we have good evidence of effectiveness. They are provided by the Sports Nutrition Department of the AIS, on condition that athletes and coaches receive education about the appropriate use of Group A supplements, and their place in a state-of-the-art sports nutrition plan; that athletes and coaches provide access to AIS for opportunities for research on the effects of supplements; and that risk of inadvertent doping is carefully considered.

Group B supplements are those about which we have inadequate knowledge, and on which we need further research, e.g. colostrum, fish oils, probiotics, and beetroot juice. The AIS will consider these supplements for provision to AIS athletes only under a research protocol to monitor performance or health benefits. Again, inadvertent doping risk of Group B supplements is carefully considered before approval.

Group C supplements are those about which we have little proof of beneficial effects and they are not provided to AIS athletes. These include ghinseng, ribose, lactaway and glucosamine. Despite their ineffectiveness, they are widely marketed to and used by athletes, who do so at their own risk. In some cases, Group C supplements have been shown actually to impair sports performance.

Group D supplements, including stimulants, prohormones and glycerol, are those that AIS says should not be used by their athletes. They include some banned substances, and some that carry a high risk of being contaminated with substances that could lead to a positive drug test.

This classification system is a clear and useful guide for athletes and coaches, and it makes clear and firm recommendations for the minimisation of risk in the use of sports supplements.

Technologisation of sport and instrumentalisation of the athlete

With the problematic nature of sports supplements comes problematic practice – and the decision of the athlete to use them brings various consequences. Declaration demands that "all therapeutic medications, supplements, vitamins and any other agent being considered for use by an AIS athlete MUST BE DECLARED to an AIS medical practitioner as soon as is practicable" (Australian Sports Commision, 2012, section: Policies). Then there may well be a requirement for close cooperation between the athlete and laboratories and nutritionists – an approach that is seen in the conclusions of de Hon and Coumans (2007, p 800) who say: "the best possible solution for athletes who wish to use nutritional supplements must include laboratory-based analysis for doping substances, preferably repeated for every new batch. The most important educational message, however, is to use a nutritional supplement only if it is deemed of benefit by a nutritional expert."

Conclusion

We have come a long way since the days when athletes would try a supplement on personal recommendation, or on anecdotal evidence, or because it was fashionable. An increase in our knowledge base, together with an acceptance on the part of athletes that they bear personal responsibility for what they ingest, means that they must all take care to avoid risk and remain vigilant. However,

coaches and sport systems have a duty of care which must be evidenced in the way that athletes are advised and supported through the decision-making process. Even though this is making sport practice more sophisticated (and possibly more and more instrumentalised), what can be seen as a benefit is the increased engagement of the athlete with the processes that directly affect her, making her more knowledgeable and more responsible for her choices, rather than just a cog in the machinery of sport production. Becoming aware and well-informed, and limiting the use of sports supplements to only what the athlete sees as ethical, means becoming more free from various kinds of imposed duties and possible failures, and also free from the coercive effects of suspicion and fear of advantage loss.

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Why follow leaders? – Coaches' social power in team sports

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Abstract: As a part of a larger research program, this pilot study was carried out to investigate Swedish team sport coaches' available resources when influencing athletes. To achieve this, Raven's (1992, 1993) taxonomy of power was used as a theoretical framework. However, the universality of this theory has been questioned by some researchers (Krause and Kearney, 2006; Koslowsky and Schwartzwald, 1993). Group interviews were conducted with 23 athletes (12 male) from seven teams representing four different team sports and data was analysed using both an inductive and deductive content analysis. The deductive analysis showed that, with the exception of legitimate equity, all bases suggested by Raven were present in the data. In the inductive analysis, 24 sub-categories emerged that described different aspects of the higher order categories (e.g. bases of power), providing additional knowledge on the resources available for coaches in team sports when influencing athletes.

Keywords: Power, influence, coaching, leadership, coach-athlete relationship.

Introduction

The power relationship between coaches and athletes is a neglected area within the field of coaching science (Galipeau & Trudel, 2006). This is somewhat surprising, especially as power is crucial for the ability of leaders to influence followers (Yukl, 2006). However, a body of knowledge has recently begun to accumulate with insights generated mainly from sociological studies (see for instance: Barker-Ruchti, 2007; Cushion & Jones, 2006; Johns & Johns, 2000; Potrac, Jones & Cushion, 2007; Purdy, Potrac & Jones, 2008; Purdy, Jones & Cassidy, 2009).

Much of the research on power and social influence within disciplines outside of sport sciences (e.g. psychology and management research) has taken its point of departure in the theoretical propositions made by French and Raven (1959). Their theory offers a way to understand and explore what enables somebody (e.g. coach) to wield influence over others (e.g. athletes). This may also explain why their work is used in text books on sports coaching (e.g. Jones, Armour & Potrac, 2004)). Nevertheless, their work is rarely used to empirically examine coaches.

Theoretical approach

French and Raven (1959) defined social influence as a change in a person's attitude, belief or behaviour caused by another person or group. Power, then, they saw as the potential or ability of a person or group to produce such influence. In their original model they identified five types of resources (what they referred to as bases of power) that an agent can draw from when influencing a target; (1) reward, (2) coercive, (3) legitimate, (4) expert and (5) referent power. Here – and throughout the whole article – described with reference to the coach-athlete relationship. Reward and coercive power is power that stems from an athlete's perceptions of the coach's ability and readiness to

administer rewards and/or punishment for compliance or non compliance. Legitimate power is based on an athlete's belief that s/he is obligated to do what the coach wants her/him to do because of the position the coach holds. Expert power stems from the athletes' belief that the coach has some special knowledge and athletes comply because they think that the coach 'knows best'. With referent power athletes identify with the coach, and see the coach as a point of referent for their own behaviour and attitudes.

Although left out in their original work, Raven (1965) later added informational power to the taxonomy. Informational power is at work when a change in an athlete's behaviour or attitude is due to information given by the coach, and differs from expert power in that sense that it is the message (e.g. information), rather than the source (e.g. coach) that is the cause for the athletes' change in behaviour or belief.

Even though the bases of power are described as separate constructs there are significant overlaps between them, and findings from empirical research have shown that certain power bases influence perceptions of other bases (Carson, Carson & Roe, 1993; Rahim, Antonioni & Psenicka, 2001). Put in a coach-athlete relationship, a coach might be perceived as having expertise simply due to the fact that s/he holds a coaching position. Coaches' expertise might also evoke perceptions of referent power, as when the coach is a former skilled player who might be expected to serve as a role model for the athletes.

Raven (1992, 1993) expanded the original taxonomy into the Power/Interaction Model of Interpersonal Influence. In this new extended model, the original six bases of power have been further differentiated into eleven bases; referent, expert, informational, reward (personal/impersonal), coercive (personal/impersonal) and legitimate (position, reciprocity, equity, dependence)

power. First, this model differentiates between personal and impersonal reward and coercive power. On the one hand, personal reward and personal coercion is based on being liked and getting approval, or avoiding dislike and disapproval, from someone we value. Impersonal reward and impersonal coercive power, on the other hand, is based on more tangible rewards or punishments.

Second, Raven (1992, 1993) differentiated legitimate power into four separate categories. Legitimate position overlap with the original conceptualisation of legitimate power, where a coach, based on his role or position, is perceived to have the right to expect the athletes to comply. Legitimate reciprocity is built on the norm of reciprocity, which refers to complying as a way to return a favour. Here the athlete feels obligated to comply with the requests because the coach has done something positive for the athlete. Legitimate equity is based on an athlete's sense of obligation to comply with the coach to compensate for some wrong doing or problem that the athlete has caused the coach. Finally, legitimate dependence stems from the norm that we feel obligated to help people who are dependent on us, or cannot help themselves. Here the athletes comply with the coach because they feel that s/he needs their assistance or help in carrying out his/her work. This is sometimes referred to as 'power of the powerless' (Raven, 2008).

When tested empirically, both the original and the differentiated taxonomy have produced ambiguous results on the validity of the factors (i.e. bases). In an investigation by Raven, Schwarzwald and Koslowski (1998), data failed to support the eleven factor taxonomy. Instead a seven factor solution was found (expert/information, impersonal reward/impersonal coercion, personal reward/personal coercion, legitimate equity/legitimate reciprocity, referent, legitimate position, and legitimate dependence). In another study, Krause, Boerner, Lanwehr and Nachtigall (2002) examined conductors' bases of power

in an orchestra setting. The empirical findings suggested a four factor taxonomy (reward/punishment, expert/referent, information, legitimate position). Based on these results, Krause and Kearney (2006) have stressed the importance of taking the context into consideration when analysing social power. They propose that different sources of power exist in different contexts, which renders a universal taxonomy of power bases unrealistic. In a similar vein, Koslowsky and Schwartzwald (1993) found support for a four factor solution of social power – were expert, coercive, reward power were distinct bases on their own, while referent, information, and legitimate power collapsed into one category – when investigating power tactics in conflict situations. Based on their findings they argue that contexts greatly determine what type of influence strategy is appropriate in a relationship.

Research using French and Raven's taxonomy on sport coaches is scarce. The Power in Sport Questionnaire developed and used by Wann and colleagues (Wann, Metcalf, Brewer and Whiteside, 2000; Wann & Pack, 2001) is one exception. This questionnaire was designed to measure French and Raven's five originally postulated bases of power, excluding informational power and the new bases in Raven's more elaborated taxonomy. Results from these studies support a five factor model in a sporting context. However, when applied and examined in a Turkish context, Konter (2007) only found support for a four factor taxonomy, leading him to exclude reward power due to its culturally unsuitability in the Turkish context.

The present study was a part of a larger research project to investigate coaches' power and influence in team sports. The aim of this pilot study was to examine Swedish team sport coaches' available resources when influencing athletes by using Raven's (1992, 1993) expanded taxonomy of bases of power as a theoretical framework. Given that leadership in essence is about influencing

others to achieve a common goal (Northouse, 2007; Yukl, 2006), the lack of empirical research on what makes it possible for coaches to influence athletes is surprising. Furthermore, little research has been conducted on power in the coach-athlete relationship outside of English speaking countries.

Method

Sampling and recruitment

Being a pilot study, it was judged that a heterogenic sample would serve the purpose of the study best. Participants should cover different team sports and different characteristics within their sport. Hence a purposeful sample (Patton, 2002) was recruited. The criteria employed by sporting federations to classify athletes and teams into competition categories (i.e. sex, age and skill level) were used to ensure the representativeness of the data. Based on these categories (i.e. sex, age and skill level) a sample-matrix was created. In this matrix eight possible groups emerged (e.g. adult male elite team, youth female non-elite team). In the final sample, participants representing seven of the eight groups were included, with participants from a female, adult, non-elite team missing. The total sample consisted of 23 athletes from four different team sports. There were three adult teams and four youth teams represented. The participants in the youth teams were between 16 – 20 years old, and the adult team participants were between 21 – 30 years old). Four of the teams competed on elite level and three on non-elite level. There were three female and four male teams. The characteristics of participants were as follows:

- Three participants from a female youth non-elite handball team
- Three participants from a male youth elite handball team
- Four participants from a male youth non-elite football team
- Three participants from a male adult non-elite ice-hockey team
- Three participants from a female adult elite football team

- Four participants from a female youth elite volleyball team
- Three participants from a male adult elite football team

Participants were recruited from clubs in the local sporting community. To find teams/participants that matched the eight groups in the sampling-matrix (described above) the author approached different people within his sporting network. Once identified, participants were then contacted directly, except in two cases where contact was established via the participants' head coaches. Group interviews took place at the athletes' training facilities either prior or after a training session, except in two cases. One of the group interviews was conducted at the author's University, and one took place at a sports centre where the athletes participated in a national competition tournament.

Data collection procedure

As a part of a larger project on power and influence in team sports, a semi-structured, open ended interview schedule was developed. The interview schedule was designed to capture both the participants' general perceptions of power and influence in team sports, as well as the more specific research question on coaches' available resources when influencing athletes (e.g. bases of power). The key questions used are presented below. In connection to question five, the subjects were given an outline of French and Raven's original six bases of power. They were then asked if they recognised these bases in the coach-athlete relationships they experienced, and were also encouraged to give examples. To use targeted questions after open ended questions is a recommended data collecting technique when information is to be analysed with a deductive content analysis. (Hsieh & Shannon, 2005)

1. Does your coach have any influence on whether or not you will reach the goals you have set within your sport?

2. To what extent does your coach control what you do on the field/court, during games/during practice?
3. Does your coach have any influence on what you are doing outside your sport?
4. Do you always do as your coach wants you to do?
5. Why do you do what your coach wants you to do?
6. Would you say that a coach has power?
7. Would you say that you athletes have any power over your coach?
8. Would you say that some players have power over other players in your team?

Data was obtained through group interviews facilitated by the author. The groups consisted of three to four athletes (on average three athletes) and lasted between 22 and 38 minutes (with an average of 30 minutes). Even though the conducted group interviews shared many characteristics of *focus* group interviews (see Morgan, 1998), there were no intentions to gather any data on the interaction or dynamics of the group. The group interview method was chosen for two reasons: First group interviews are a more time efficient data collecting method than individual interviews (Cohen, Manion, & Morrison, 2007). Second, the group interview method was used to provide a natural context (Eder & Fingerson, 2003) which was expected to facilitate the participants' perceptions of their coaches' power. Using research participants from established groups is further beneficial as the participants can "relate each other's comments to actual incidents in their shared daily lives" (Kitzinger, 1994, p 105). This was often the case during the interviews, where the participants collectively described incidents and activities in their team. Another example of how this was manifested was when one participants recalled and reminded some of the other participants on previous experiences; "Didn´t you once have a coach that..." and "Like your former coach who...". However, a

possible limitation of group interviews is that one or two voices might dominate over others. During the interviews, therefore, the interviewer made efforts to make sure that all participants had multiple possibilities to express themselves and comment on the present topic.

Before each interview the participants were informed that the purpose of the study was to explore their perceptions of coaches' influence in team sports. Due to the fact that the word "power" is sometimes perceived as having a somewhat negative overtone (Wrong, 1995), the more value neutral "influence" was used. In addition the participants were informed that there were no right or wrong answers; that they should feel free to "think aloud"; and that they could comment on the other participants' statements. The athletes were also encouraged to talk about both present and previous coach-athlete relationships.

Ethical considerations

All participants took part voluntarily and oral informed consent was obtained from all participants. Participants were informed that they could withdraw from the study at any time and that all clubs, coaches and players would remain anonymous.

Data analysis

All data were audio recorded and transcribed verbatim by the author. To become familiar with the contents the transcripts were read repeatedly. Both an inductive and a deductive approach were used to analyse the data. A directed, or category driven, content analysis was employed during the first phase of the analysis. This is a useful analysis method when the goal is to "...validate or extend conceptually a theoretical framework or theory" (Hsieh & Shannon, 2005, p.1281). Since the theory of use in this study was Raven's (1992) expanded and differentiated taxonomy, its eleven bases of power served as the framework for

this analysis. In this first phase, text passages that appeared to represent some of the pre-existing categories (i.e. the bases of power) *or* the exercise of power (i.e. reasons for complying, influence attempts, resistance) were marked. From these passages units of meaning were derived and classified. In a second phase, a conventional, or data driven, content analysis was used. Here, meaning units that had been classified in the same category (e.g. source of power), but described different aspects of the category, were coded into sub-categories. Even though the analysis methods employed are described as two separate phases, the actual analytic process involved shifting back and forth between the two approaches. Data (i.e. meaning units) that could not be classified into any higher order categories were classified into a separate category.

Trustworthiness

The study followed the recommendations outlined by Graneheim and Lundman (2004) to ensure trustworthiness. They propose three concepts central to achieve trustworthiness – credibility, dependability and transferability. To establish credibility participants from different contexts (e.g. different team sports) and with different experiences and characteristics (e.g. age, sex, skill level) were invited to shed light from various perspectives on the research question. Second, representative quotes are used in the presentation of the results to illustrate difference and similarities within and between categories. Third, at the end of each interview the participants were given a summary of what had been discussed during the interviews and were given a possibility to comment and reflect on what had been said. Fourth, an inter-rater procedure was employed. The inter-rater, a doctoral student with coaching experience, was given descriptions of each of the categories and their sub-categories. He was then assigned 40 (15%) randomly selected meaning units to classify into the sub-categories. The result from this process showed a 96% agreement in categorization.

Dependability was achieved by using the same interview schedule in all the interviews. The use of the semi-structured interview schedule provided a consistency in the data collecting process, as well as the possibility for different concepts and ideas to emerge during the interviews.

The concept of transferability refers to the extent of which the results can be transferred to other contexts. Even though "it is the reader's decision whether or not the findings are transferable to another context" (Graneheim and Lundman, 2004, s.110), descriptions of the context, participants, data collection and analysis employed in this study were given to facilitate transferability.

Results and discussion

The deductive content analysis showed that the power bases suggested by Raven (1992) were available for the coaches when influencing the athletes. An exception was legitimate equity. In the analysis, 246 meaning units were derived that were perceived as capturing some aspect of the preexisting categories (e.g. power bases).

Through the inductive analysis, 24 sub-categories emerged; describing different aspects of the higher-order categories (i.e. power bases). All categories except reference power and legitimate reciprocity power were found to have sub-categories. A summary of the results are shown in Table 1. Categories and sub-categories are presented and discussed below.

Table 1. Categories and sub-categories of the inductive analysis

Category	Sub-category	Meaning unit
Legitimate position	Right to	*"After all, that is something you accept when you join a team, sort of, that the coach is the one who makes the decisions"* *"It's the leader"* *"He's the coach"*
	Rationale	*"You can't have anarchy in a team, that doesn't work."* *"Everybody else is like equal in the team, so you need someone who directs"* *"There has to be someone who directs on the court"*
	Age	*"You… like… have respect for an adult, sort of"* *"It's almost like an unwritten rule that you look up to people that are older than you"*
Legitimate reciprocity		*"They are here for us, and they don't get paid [for it]"* *"They put in as much time as we do"*
Legitimate dependence	Coach dependence	*"…'now we must do this', you know… 'now I want this to', for his/her sake"* *"…out of compassion"*
	Team dependence	*"…for the group to stick together"* *"…you would mess up for the whole team… then you might as well do something else"*
Expert	Knowledgeable	*"If he knows a lot about hockey… … then you automatically listen to him"* *"If you see that the person is knowledgeable"* *"You believe in the coach's knowledge"* *"He knows what he's talking about"*
	Experienced	*"If you know that he is experienced… maybe played in the first league… then you often trust that he is right"* *"Played himself for many years"* *"If he himself has been playing hockey on a high level…"*
	Learning outcome	*"If you feel that you learn something, then you will listen more to what he says"*
	Team Management	*"As long as he gets the best out of the team.… … that's to some extent what it's all about, that he shall get the best out of the team"* *"It might not be the best for me, but it benefits the team and everything…"*
Impersonal Coercion	No playing time	*"Then you don't play on Monday"* *"Players who are doing well on practice are kept out of the team"* *"Taken of the court"* *"…after all it is he who decides if I get to play the matches…"*
	Physical activity punishment	*"Physical exercise punishment"* *"Different types of running, push-ups, sit-ups"*
	"Sticks"	*"Doing boring activities"* *"It could be like small things [fun activities] that are easy for a coach to take away…"*
	Collective punishment	*"Yell at the whole team when there is just two persons behind a conflict"* *"There were never any individual punishments, but rather team punishments.… … run a little bit extra the next day…"*
	Impede development	*"… the coach has a network with contacts and can give you a bad reputation among other clubs"* *"… if you ignore everything that the coach says, he/she might not feel like helping you in your development…"*
Personal Coercion	Disliking	*"… being yelled at"* *"… or if the coach doesn't like you"*
	Poor relation	*"It feels like being invisible, sort of"* *"He can ignore you, and that's not so fun"*

Category	Sub-category	Meaning unit
Impersonal reward	"Carrots"	*"… make you team captain one day"* *"… when we win we get to play indoor football"* *"perhaps a little more…. … power-play during practice"*
	Climate	*"… that you feel good at your work place"* *"… positive energy, sort of"*
	Getting playing time	*"… simply gets more playing time"* *"One reason is the you get to play if you do as they say"*
Personal reward	Good relation	*"… you want to have a good relation with your coach…"* *"… to be seen as a person"* *"to gain his trust"*
	Praise	*"Give you personal tips, so you feel appreciated, you know*
Referent		*"[If the coach] is someone that you look up to and he gives you an ultimatum, or 'now you have to do this', then you listen to that."* *"… then it becomes natural, that you look up to the leader and listen to what he says"* *"If you agree with a lot of what he says, that is, you are on the same side…"*
Information	Explanation	*"I think that it is important that s/he explains why we do some drills…. … so you have an idea why you do certain things"*
	Persuasion	*"…rhetorically skilled…"* *"There are people who can express themselves very well, and get people on their side…"*
	Perspective	*"… but a coach…. … sees things that I can't see myself"* *"… but they see things in another way"* *"You know that he…. … sees what I might not"*

Legitimate position

Legitimate position power relates to the idea (or rather norm) that athletes should follow the directions of the coach. Within this category, three sub-categories emerged. These were labeled as 'right to', 'rationale' and 'age'. First, all statements indicating compliance due to the position held by the coach was categorized as 'right to'. This "taken for granted"-belief among athletes has been shown in other studies on coach-athlete relationships within team sports (e.g. Cushion & Jones, 2006). It reflects the result of a socialization process, through which athletes internalize how power should be distributed between different positions within a (team) sport context.

The second sub-category contained statements where the athletes provided some sort of rationale as to why they complied with their coach's legitimate power. The following quote shows how one athlete legitimized the coach's right to direct the actions of the players: "… in a group you must, I mean… you have a coach for a reason. When you are that many individuals and you are supposed to go in the same direction you need to have have some guidelines… because everybody can't diverge in completely opposite directions… wanting to do completely different things". A third and final sub-category was 'age'. Here the athletes' mentioned that the coach being an adult made them comply with his/her requests.

Legitimate reciprocity

The norm of reciprocity means that we feel obligated to comply with someone who has done something positive for us. Compliance on the part of the athletes was not linked to the formal role held by the coach, but rather to a belief that the coach had a legitimate right to request/demand something in return for what s/he had done for the athletes. Statements that reflected the athletes' assumptions that they somehow owed it to the coach to comply were categorized as legitimate reciprocity. As one athlete said: "It's a matter of give and take… …you know, you can't just take… you have to… like… give something back…" . No sub-categories were found within this category.

Legitimate dependence

Two sub-categories were found that reflected complying as a result of not wanting to let those who depend on you down. These were labeled 'coach dependence' and 'team dependence', based on the target of the dependence. 'Coach dependence' was expressed as an act of compassion, and was present when the athletes perceived that something was of great importance for the coach. 'Team dependence', on the other hand, was based on the athletes'

perceptions that they had to follow the directions of the coach in order not to mess things up for the other members of the team. Perhaps the following quote reflects this sub-category best. “You gather five-six times a week to do something together, and everybody has sort of a common goal. I mean, should you just quit then, and simply ignore some of the things that the coach says, who after all has some, you know, leadership…”. This example shows that the inter-dependent nature of teams can be a source of power that a coach can draw from when trying to influence one or more of the athletes. A coach using legitimate dependence could thus either refer to him-/herself (“I really need you to do this for me”) or to the team (“Don’t let your team mates down now”).

Expert

Following legitimate position, expertise unfolded as the most self-evident power base in the athletes’ discussions. The four sub-categories found were ‘knowledgeable’, ‘experienced’, ‘learning outcome’, and ‘team-management’. ‘Knowledgeable’ was used as a label for statements that reflected athletes perceiving coaches’ sport specific knowledge as a reason for complying with his or her requests. “If he knows a lot about hockey… … then you automatically listen to him”. The second sub-category was based around the importance of coaches’ own experience as athletes or as a coach. How the ‘experience’ sub-category differs from the ‘knowledge’ sub-category can be seen in the following quote: “But I think experience is quite important as well and not just knowing about game strategies”. Nevertheless, mere experience as a player was not always considered to be enough. Some athletes expressed that the experience should come from playing at high levels. One athlete said that the fact that his former coach only had been playing a lower level made it hard to take him seriously; “He himself had played in the fifth division, then you totally lose it [the respect]”. It should be pointed out here that expert power stemming from coaches’ owns athletic experiences can be hard to tell apart from referent power.

Krause, Boerner, Lanwehr, and Nachtigall, (2002) found the same classification dilemma when studying orchestra conductors who used to often be highly skilled musicians. This issue was not probed further during the interviews, but it is most likely that both sources of power operate simultaneously. Thus, some codes labeled as experience were also labeled as referent power.

'Learning outcome', a third sub-category, reflected how the coaches were attributed expertise if the athletes felt that they were improving their sport specific skills and abilities. Rather than just trusting that the coach "knows what is best", as with the knowledgeable sub-category, the athletes here followed the coaches' instructions based on previous success when doing so.

The fourth sub-category, 'team-management', dealt with coaches having skills in making the team function and perform well. Statements like; "Maybe it's not always the best for me, but perhaps it benefits the whole team and everything", indicates a trust in coaches' knowledge of what is necessary for the team to do to maximize their development or performance. Thus, the expert content in this category was not linked to sport specific knowledge, but rather to the coach possessing leadership or management skills.

Impersonal Coercion

Five sub-categories were found describing different aspects of impersonal coercive power: 'no playing time', 'physical activity punishment', 'sticks', 'collective punishment' and 'impede development'.

Since there are a limited numbers of players who can be on the team during games/matches, a competitive situation among players of the same team is created. This might be the reason why being taken out of the team or the starting lineup was an always present reason for complying among the interviewed

athletes. Statements reflecting this were labeled as ‘no playing time’. When asked what would happen if they refused to comply with their coach, the athletes consistently gave answers in line with “getting benched”, “then you don´t play on Monday”, or “then you will be taken out of the team”. The second sub-category, physical activity punishments, was also very much linked to non compliant behavior. Examples included running drills of various forms, but also strength training exercises (e.g. sit-ups, push-ups). One athlete said “If I think of punishment, my first thought is physical activity exercises”.

The third sub-category, ‘sticks’, involved tangible punishments and included coaches administering fines, prescribing boring activities, removing play like activities during practice, and in one case the use of a scoring system for attendance at practices, where low scores were said to lead to negative outcomes. ‘Collective punishment’, where all members of the team were punished for one or two person’s actions, was a fourth sub-category. Even though the different types of collective punishments mentioned by the athletes could be categorized into some other sub-category (e.g. running drills, yelling), the impression was that the athletes perceived this as a sub-category on its own.

Coaches’ ability to repress the development of the athletes was labeled as ‘impede development’. This sub-category included bad-mouthing the athlete to people of other clubs, using his or her network to obstruct the players’ career transitions or simply not helping the athletic development of an athlete.

Personal coercion

Personal coercion included two sub-categories, ‘disliking’ and ‘poor relation’, both linked to the athletes’ relationships with the coach. The label ‘poor relation’ was used to capture negative aspects of a coach-athlete relationship the athletes wanted to avoid. This included being ignored, not getting any personal time with the coach, or the coach being cold or distant towards athletes. The

other sub-category, disliking, included situations where the coach, either implicitly or explicitly, showed that he or she did not like an athlete's actions. This was often manifested by yelling, harsh criticism or humiliation, sometimes in front of the of other team members. Non-verbal behaviors from the coach were also present in the discussions regarding this sub-category.

A central aspect of the coach-athlete relationship is the quality of the relationship. As noted by Raven (2008) the fear of being rejected or disliked can be a powerful source of power. The strength of this power base is seen in the following quote: " I mean, having someone mad at you isn't as stressful as having someone disappointed in you… …And to feel that the coach is… like… disappointed in you because you didn't do this or that, that's really hard. Then you are really feeling insufficient, and just 'shit, I can't take this'".

Impersonal reward

The power base of impersonal reward consisted of three sub-categories, 'carrots', 'good climate', and 'given playing time'. The sub-category of 'carrots' included different types of tangible rewards such as awards (i.e. being appointed team captain) and prizes. The category also included activities that the athlete liked to do (e.g. play or other types of intrinsically motivating activities). Climate referred to statements regarding the coach's ability to create a positive climate or atmosphere in the team. Finally, the sub-category of given playing time was used to describe complying with the coach as a means to optimize the chances of getting time on the court during matches. Nevertheless, playing time as perceived as a threat or punishment, rather than as a reward, seemed a far more common reason for complying.

Personal reward

‘Good relation’ and ‘praise’ were the two sub-categories that emerged in the data of the personal reward category. The former reflected athletes complying in order to have a good relation with the coach, and was the opposite of the poor relations sub-category found within personal coercion. It should be pointed out, however, that in cases where athletes wanted to avoid a poor relation with the coach, this seemed a goal in itself. A good relationship appeared more as a means to gain the trust of the coach. Further, besides being a power base on its own, this sub-category also appeared as a “mediating base”. That is, a resource that could enhance or diminish the effect of other bases of power, as can be seen in the following quote. “If you don´t have a good relation with your coach then perhaps you are not as motivated to do exactly as he decides”. Meaning units that showed compliance due to liking of the coach – “If you like the coach, then you of course listen to him/her” – was also included in this sub-category.

Another source of personal reward for the athletes included being praised by the coach. Getting approval and liking for your actions can be seen as a strong reason for complying, here illustrated by the following quote: “Personally I think… … that the best there is, is when the coach says ‘What a great game you did’… just say stuff like that… ‘You should play like that all the time’, you know…” This quote also provides an example of the controlling aspect of feedback that a coach can use in order to direct the behavior of an athlete (for a more elaborate discussion on this topic, see Mageau & Vallerand, 2003).

Referent

With referent power individuals perceive another person, or a group, as a point of reference for their own thoughts and/or behavior. A coach with a background as a former elite player, as some of the participants presently had or had experienced, is likely to evoke attributions of referent power among the athletes. Statements that reflected compliance due to admiration or perceiving the coach

as a role model was thus coded under this label. As mentioned earlier this also included some meaning units categorized as experience in the expert category. Other meaning units that were classified as belonging to this category were identification based on social identity. Athletes who saw their coach as "one of the gang, sort of", were more likely to comply with his requests. This type of influence based on social identity, rather than social attraction, is a somewhat neglected part of referent power in studies on bases of power (Salem, Reischl, Gallacher, and Randall, 2000).

Information

Informational power consisted of three sub-categories, 'explanation', 'persuasion' and 'perspective'. The boundary between 'explanation' and 'persuasion', however, was subtle. The difference being that 'explanation' focused on athletes complying due to a rationale or explanation given by the coach for a prescribed behavior, whereas 'persuasion' was chosen to capture statements about coaches' ability to get "a message across" (being talkative, rhetorical or convincing). Both sub-categories are seen in the following quote:"My previous coaches have not been able to convince me why it is good to do something in a certain way. What I feel now is that I have a coach who can convince and explain why something is necessary."

When athletes are presented with a rationale for the prescribed behavior – and thereby given a possibility to evaluate the benefit of the behavior – compliance is due to the information presented rather than a trust in the coach's expertise or legitimate power. This is possibly the case in the example above, where the athlete's reasoning for compliance shifts from one source of power, likely legitimate power, to informational power.

The third and final sub-category was ‘perspective’. This label was chosen to capture the fact that coaches literally have a different perspective to that of the athletes out on the field or court. The athletes felt that coaches “outside” perspectives gave them specific information that they themselves could not gain. In this sense, the coach was not necessarily being seen as possessing expert knowledge, but rather having access to another perspective.

Unclassified data

In the data some meaning units described traits and behaviors that the athletes saw as important for the coach to possess in order to follow his/her directions. The most salient traits mentioned were self-confidence and decisiveness. Athletes spoke of coaches who lacked these characteristics, and how it made it hard to take directions from those coaches seriously. Coaching behaviors mentioned by the athletes involved the coach displaying confidence in the athletes, having a “good attitude” and showing commitment and enthusiasm for the task. Raven (personal communication, July 2, 2010), suggests that such traits or behaviors can make the coach appear as either having superior knowledge (expert power), or as someone with admirable qualities (referent power). Research showing that non verbal cues (i.e. facial expression, visual behaviour, and body posture) impact perceptions of power bases (Aguinis, Simonsen, & Pierce, 1998) lends support to his suggestion. In this analysis, however, it was concluded that the data did not contain enough information for a trustworthy classification of these two different bases of power.

General discussion

The purpose of this article was to examine coaches’ available resources when influencing athletes in a Swedish team sport context. The results showed that Raven’s (1992, 1993) differentiated taxonomy of bases of power can be utilized to describe and classify coaches’ available resources. However, the absence of

one of the suggested bases (i.e. legitimate equity) supports the claim put forward by some scholars (i.e. Koslowsky & Schwarzwald, 1993; Krause & Kearney, 2006) that context is important when trying to understand what type of resources an agent (e.g. coach) can draw from when trying to influence a target (e.g. athlete). Nevertheless, the present study offered no explanation of why legitimate equity was not found in the data. Since it was not probed further during the interviews, a question arises whether this was due to methodological issues (i.e. it was not explored thoroughly enough in the data collection), or because of an actual absence of this particular base in Swedish team sport contexts.

Limitations and issues of trustworthiness should be considered. The relatively small, although heterogeneous, sample size might raise questions on the transferability of its results to the larger population (i.e. Swedish team sports). Second, in order to establish credibility member checking is commonly used (Biddle, Markland, Gilbourne, Chatzisarantis & Sparkes, 2001) where participants are invited to review the interpretation of the data. Such a procedure was not undertaken in this study, but could prove useful in further studies of this nature.

The methodological design used in this study was employed to identify coaches' available bases of power. It is inappropriate, therefore, to draw any conclusions regarding how often athletes comply due to an individual source. It is possible that some coaches draw more from legitimate and informational power, while other base their leadership more on reward and coercive power. Nor can conclusion be made regarding any effects of the individual bases. That is, the results give no answer to what the consequences are for athletes' wellbeing, motivation, learning, performance or general experience of their sport, when complying due to different sources of power.

Notwithstanding, the results point towards that the athletes experience different outcomes (e.g. feeling insufficient or empowered) when different bases of power are at work. Findings from work and organizational psychology have shown that different bases of power lead to different outcomes. Where referent and expert power are linked to positive outcomes, coercive and legitimate power are associated with negative outcomes (Yukl, 2006). This further point at the importance of considering the ethical and moral dimension of sports coaching. The use of certain techniques (e.g. making people feel insufficient and using physical punishment) to achieve compliance is questionable from any ethical and moral standpoint. The results from this study could be a tool in helping coaches reflect on their own coaching style and on what sources they draw from when influencing their athletes. By raising awareness of other available resources (e.g. informational and expert power) it should be possible to achieve a reduction in the use of more maladaptive strategies (i.e. coercion), thus creating a more positive learning environment for athletes.

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