

Does Elite Sport Develop Mass Sport?

A Norwegian Case Study

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Abstract

The notion that elite sport generates mass sport, seems to be a social fact among many and influential members of the society. The issue is, however, under-researched, and the little research which actually exists does not confirm a causal link. In this article, we take as a point of departure the case of Norwegian biathlon, and its development, both as elite sport and mass sport, to nuance the picture. We are not guided by any particular theory, but believe in a thick description of the empirical case in order to understand it. Therefore a mixture of methods is applied: document analysis, statistics and interviews. The article shows how increased income from elite performance makes it possible for a sport federation to make strategies and prioritize incentives for recruitment of mass participants. At the same time, it is evident that the relationship between elite sport and mass sport is best understood as a complexity of figurations where economic, strategic and other aspects interplay. In sum, elite sport does not generate mass sport *per se*, but it *may* contribute *indirectly*. In the end, it is critically reminded that mass sport is not prioritized to elite sport; apparently, the former is “prioritized” only when the latter is prioritized first.

Key words: elite sport, mass participation, Norway, Norwegian, biathlon, case study

Introduction

Norway, like many other nations, may be regarded as a ‘sporting nation’ in several respects. Firstly, despite its relatively small size and population, Norway has won a significant number of medals in international competitions; especially in winter sports.¹ That the Olympics, and the Winter Olympics especially, are taken very seriously, is made clear in the Sport Policy Document of the Norwegian Olympic Committee and Confederation of Sports (NOC) in which it is stated that the goal of elite sport is to ‘be among the top 3 European nations, measured in number of medals in summer and winter Olympics (Beijing 2008 and Vancouver 2010) seen together’ (NIF, 2007:9). Secondly, relatively many Norwegian citizens participate in mass sport (Breivik & Vaagbø, 1998; Breivik, 2003). But is there a causal link? Is it because some of the best skiers in the world are Norwegian that Norwegians – more generally – are skiing? Does success at the elite sport level explain participation at a mass sport level?

Biathlon is a sport with a remarkable development in Norway in recent years. In this article we will analyze Norwegian biathlon with regard to the relationship between elite and mass sport. It should be noted that biathlon is a small sport; the association comprises 5000 members (NIF, 2006). Nevertheless, it is believed that the mechanisms – if any – between elite achievements at the international level and the challenges associated with grass root recruitment are similar to other kinds of sports. In that respect, we will add a small contribution to the broader debate, without aiming at finding the solution to the overarching question and everlasting debate about the relationship – if any – between elite sport and mass sport. On the contrary, we will apply insights from this debate – for example scholars holding that there is not a particularly strong relationship between elite level success and high participation numbers (Coalter, 2004; Vigor et al., 2004; Horne, 2007) – in order to analyze Norwegian biathlon.

There is, it seems, a commonly held belief, especially amongst politicians, that mass sport may be explained by elite sport. One example is a claim from the (then) Prime Minister of Norway, Kjell Magne Bondevik, in an interview during the Olympic Winter Games in Nagano, Japan (1998):

¹ See for example the medal overview from Salt Lake City: http://www.olympic.org/uk/games/past/table_uk.asp?OLGT=2&OLGY=2002, or the database at the IOC server: http://www.olympic.org/uk/athletes/results/search_r_uk.asp.

Olympic gold puts Norway on the map and stimulates the Norwegian people to be active on ice and snow. There are many Bjørn Dæhlies around. They would not be there if they did not have an idol ... It [elite sport] is good entertainment and good culture, and it is a positive relationship between elite sport and mass sport (cited in Hole, 1998:54).

Statements about a causal link between elite sport success and mass sport participation are often used as justifications for hosting mega-events (Vigor et al., 2004; Preuss, 2007). Indeed, such a campaign surrounded the Olympic Winter Games in Lillehammer, Norway (1994). The intention was to use the Olympics to motivate people and to increase the level of physical activity in the Norwegian population, including the creation of long lasting attitudes for a healthy lifestyle.² An external report concluded that the campaign had seemed to work better than former and similar efforts (Skjæveland, 1993).³ The final report from the NOC, which was the implementing body, held that the campaign had been a success (NIF, 1994). The argument was made by referring to a bi-annual survey, representative for the Norwegian adult population (over the age of 15), which showed an increase in the population's physical activity (defined as 'out of breath' and/or 'sweaty' more than once a week) from 48.0 per cent in 1989 to 52.9 per cent in 1991. However, looking at the numbers for the subsequent years, which seem to be overlooked by the authors of the mentioned reports, the active part of the population fell back to 51.3 per cent in 1993 and 48.9 per cent by 1995 (Breivik, 2003; Krangle & Strandbu, 2004). Given that the aim, as stated above, was for a long lasting legacy, this can hardly be said to have been achieved.

The belief in the reciprocity between elite sport and mass sport is not, of course, solely Norwegian, nor is it a new phenomenon. Actually, it has been part of the Western sport regime, at least for the last century. Pierre de Coubertin, the founding father of the modern Olympics, once claimed that: 'So that hundred may train their bodies, it needs fifty to practice sport. And in order for fifty to practice sport, twenty have to become specialized. In order to have twenty specialized, it means that five must be capable of outstanding peak performances' (Coubertin, 2002, cited in Müller & Poyán, 2006). However, although it is 'built into' Ol-

2 It should be noted that in relation to the application for the Games in 2018, the Norwegian candidate (the city of Tromsø) started a similar campaign (to that of 1994). <http://www.tromso.kommune.no/index.gan?id=6635&subid=0>.

3 Here we mean other campaigns, not necessarily related to the mega-events indicated. For example, the 'TRIM campaign' (1967-1972) has been called a 'giant sport political bluff' (Tønnesson, 1986:301).

lympic thinking that mega-events and elite achievement generate participation for the masses, there is little research into the issue of the extent to which elite sport generates participation in mass sport, if at all. However, the limited amount of literature that does exist, does not confirm the thesis of reciprocity, or of causality.

Regarding the Prime Minister's statements, it should be added that people have been skiing in Norway well before the Winter Olympics even existed. Even in specific relation to the impact of the Lillehammer Olympics, there is – as noted above – little evidence about any relationship. Indeed, in Norway there are as many examples of a negative relationship between elite performances and mass participation in the same sport, as there are positive (Fasting, 1998). In addition, a Danish study investigated international performances, in comparison with the number of participants within the same sports. No pattern was found that suggests that elite sport performances help to explain corresponding positive developments in mass sport participation (Nielsen, 2002). On the contrary, there were – as was the case in Norway – many examples of sports where there was a negative correlation between elite sport achievements and the number of participants in a particular sport. This is supported by a comparative study of several sports in several countries, where it was made evident that when elite sports development is prioritized, it is at the expense of mass sports development (Green & Houlihan, 2005). In the vast number of cases, the sport federations that are responsible for elite sport development are also responsible for the development of mass participation in that sport. An important point for the analysis here is the extent to which such organizations prioritize one aspect over another.

Lofty statements about any relationship between elite sport and mass sport can – of course – possibly be investigated by nationwide samples. A contrasting approach would be to conduct a critical examination of a smaller and more controllable population in a case-study. In this article, the relationship between elite and mass sport will be scrutinized using a case-study of Norwegian biathlon (see Methodology). The following key questions will be considered: What is the relationship – if any – between Norwegian elite biathlon performances and the number of participants in the Norwegian Biathlon Association (NSSF)? And how can the relationship be explained? With regard to the latter, the policy of the NSSF is crucial, and therefore, it is now important to consider the broader context associated with the NSSF.

Norwegian sport organization and a note on biathlon

The Norwegian model for sport leans on three interdependent ideas: sport for all is the goal of the public sport policy; it is a governmental responsibility to reach the goal; and it is believed that the goal is reached by a division of labor between public and voluntary bodies. On the one hand, public organizations at different levels (state, county and municipality) provide facilities and subsidizes the sport organization, while, on the other hand, the NOC-system implements the activities. With only one national umbrella organization for sport, and with a mutual dependency and the division of labor sketched above, NOC has a monopoly of public funding to sport and has historically fulfilled the role as 'Norwegian sport'. Since the establishment of the Department of Sport Policy (DSP) in 1946, the ideology of equality has dominated the distribution of the public sector's economic subsidies for sport. For example, and as a major way of spending the state money, the DSP has ensured that facilities are available throughout the rurally dominated Norway, to make sport more accessible for everyone.⁴ The provision of facilities has traditionally been a responsibility for the local clubs, in cooperation with the municipalities. There are about 130 facilities for biathlon in Norway (KKD, 2005b).

Today, the NOC is responsible for all sports delivery, focusing on both elite and mass sport participation. Under the NOC umbrella, there are specialised/national sport federations responsible for the particular sport's provision in Norway, and for the international contact. It is one of the 56 sport federations that will be the object of investigation in this article, namely the Norwegian Biathlon Association (*Norges skiskytterforbund*, NSSF). Norwegian biathlon is organised in, broadly speaking, a pyramid structure with the national governing body, the NSSF, at the top, and then branching out to 16 district associations, and 161 affiliated clubs. However, compared to most other special sport federations, and especially to the Norwegian football association and the Norwegian ski association, the NSSF is a very small sport federation (NIF, 2006).

Biathlon is a combination of cross country skiing (today only ski skating) and shooting. Traditionally (until the mid 1990s) there were two disciplines, the normal distance (15 km for women and 20 km for men, with four shootings), and the sprint (7.5 km for women and 10 km for men with two shootings). Since 1997, new forms of races have been de-

4 Approximately two thirds of the state's sport money (the sport part of the gambling revenues) go to sport facilities, and one third goes to the NOC system of special sport federations (for example the NSSF) and the district sport associations.

veloped, to adapt to the TV format (Solberg, Hanstad & Steen-Johnsen, 2009) (see ‘Results’). Elite biathlon has three major international categories of competitions. Firstly, the World Cup consists of a number of races throughout the season, where the athletes collect points in each race, and where the athlete with the most points at the end of the season is the World Cup winner. Secondly, the World championship is held annually, and the Olympics is the third major event for biathlon, with events taking place – as is well known – every four years.

Historically, biathlon has been a sport for men, because the sport traditionally used to be related to military practices. The first men’s championship took place in 1958, while the first women’s World Championship was arranged in 1984. Since 1987, the World Championship for men and women has been a joint venture. In 1960, men’s biathlon became an Olympic discipline, whilst women’s biathlon became an Olympic sport in 1992.⁵ Through this short history of women’s biathlon, Norway has been among the best teams in the world, but mass participation amongst females in Norway is not nearly as common as amongst the males. The numbers of members are 1500 and 3500 for females and males, respectively (NIF, 2006).

With specific regard to Norwegian biathlon, it was, until the 1990s, a quite anonymous sport. Although Norwegian athletes were among the best in the world (NSSF, 2002), the media coverage used to be rare (and probably representative compared to most other sports), except during the World Championships and the Olympics. This has changed since the mid 1990s. For this reason, 1994 is chosen as a starting point for this analysis, because during the Lillehammer Winter Games the Norwegian biathletes did not win a single medal, while the rest of the Norwegian national team had great success, and won a total of 26 medals. Also in the previous Winter Games in 1992, the Norwegian biathletes had achieved below the expected level, while most of the rest of the Norwegian teams were successful (Hanstad, 2005).

Today the NSSF has two main goals, consistent with Norwegian sports policy generally, one is associated with elite sport and the other with mass sport. First, the main focus after 1994 was to be among the top two nations in the world, measured by the results in the World Cup, World Championship and Olympics. Second, in a board meeting of the NSSF in 2002, a set of goals related to mass participation was defined: (i) to double the number of registered athletes to 1500, (ii) to get 250

5 <http://www.skiskyting.no/t2.aspx?p=22369>; www.ibu.at/biathlon/history.html.

participants in national competitions for 15-16 years olds and 250 for 17-18 years olds. The numbers should be achieved within the 2005-06 season (NSSF, 2002). The goals were reached (Hanstad, 2005). It is – to remind the reader – the aim of this paper, to scrutinize the claim that elite sport generates mass participation.

Methodology

Denscombe (1998:30) argues that the rationale ‘behind concentrating efforts on one case rather than many is that there may be insights to be gained from looking at the individual case that can have wider implications and, importantly, that would not have come to light through the use of a research strategy that tried to cover a large number of instances’. Such a research design is consistent with the contention that employing a case study design offers much potential for extrapolation from the particular to the general. This requires that the case itself is as thickly described as possible. In order to shed light on Norwegian biathlon, then, data were generated through a number of methods. As Yin (2003:97-98) states: ‘a major strength of case study data collection is the opportunity to use many different sources of evidence ... Thus, any finding or conclusion in case study is likely to be much more convincing and accurate if it is based on several different sources of information, following a corroboratory mode’.

First, a qualitative documentary analysis was conducted, in particular of the annual reports from the NSSF, since 1994. Secondly, statistics from the International Biathlon Union (IBU), as well as statistics from a market research agency (MMI), were available. The former refers to data collected directly from the IBU (Hanstad 2005) about results in international competitions, from which the descriptive statistics applied in this article are made by the authors. The latter is a biannual and representative survey among the Norwegian population over 15 years old. One specific item in the questionnaire used in this article is about the interest in sports, where the respondents should identify their interest in various sports, on a 1-6 scale (MMI, 2005). Again, the statistical analysis is made by the authors, and is limited to simple correlations (Pearson’s r) between elite sport indicators and mass sport indicators.

Thirdly, four main interviews with key personnel of the NSSF (a former President, the current President, the General Secretary, and the

Head of Development) were conducted. In addition, interviews were made with fifteen elite athletes, and many informal conversations with grass root volunteers, mostly providers of youth biathlon, have been made. This informal information contributes to the development of an overall impression of the phenomenon. In sum, the application of a mixed methods approach enables a greater understanding than pure descriptive statistics, or the more abstract qualitative assessments provide on their own. The presentation of results will appear as a combination of quantitative figures and qualitative statements.

Results

With the NSSF's goal for mass participation as defined in the policy document of 2002, namely to have 1500 registered athletes within the season 2005/06 (NSSF, 2002:3), as the point of departure, the relationship between elite performances and the realization of the goal will be scrutinized. By comparing the number of medals in the Olympics and the World Championships, as well as the number of top fifteen places in the total World Cup (Figure 1) with the number of paid licences in the NSSF and number of participants in the most popular mass race, called "Liatopp sprinten" (Figure 2), significant correlations were identified (Table 1).

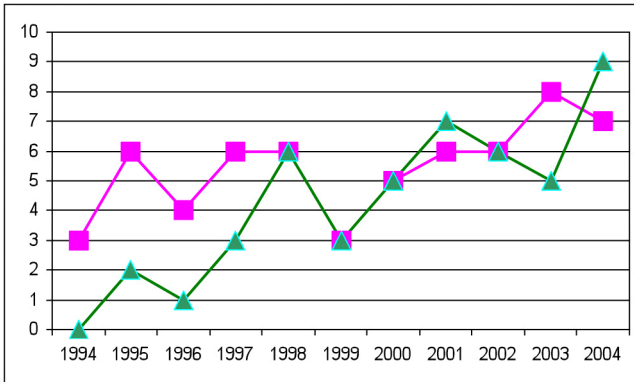


Figure 1 Norwegian Olympic and World Championship medals (triangles) and top fifteen places in the World Cup (boxes).

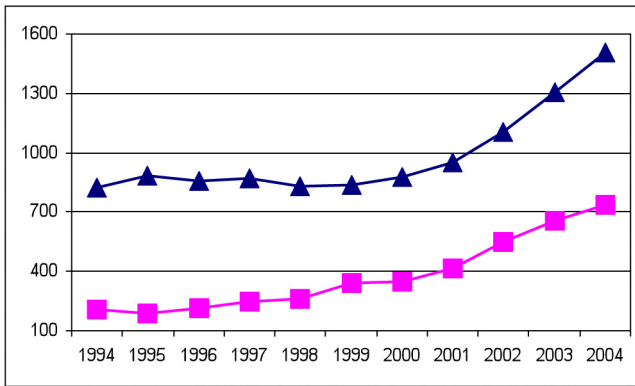


Figure 2 Registered athletes (triangles) and participants in the race Liatoppssprinten (boxes).

The correlation between Olympic/World Championship medals and registered athletes was: $r = .60$ ($p < .05$). The correlation between Olympic/World Championship medals and participants in Liatoppssprinten was: $r = 0.75$ ($p < .01$). The correlation between top fifteen World Cup places and registered athletes was: $r = 0.69$ ($p < .05$). The correlation between the top fifteen World Cup places and participants in Liatoppssprinten was: $r = 0.63$ ($p < .05$). See table 1.

Table 1 Correlation between indicators for elite sport and indicators for mass sport.

	Medals	Top 15 world cup	Registered athletes	Liatoppen mass race
Medals	1	,669*	597*	746**
Top 15 world cup	669*	1	690*	634*
Registered athletes	597*	690*	1	929**
Liatoppen mass race	746**	634*	929**	1

* $p < 0,05$; ** $p < 0,01$

While correlations not necessarily describe any causal relationships, these data do not support any hypothesis saying that elite performances explain mass participation. In that respect, one has to go deeper into the issue. Qualitative information from key personnel in the NSSF and informal information from volunteers at the grass root level, as well as additional statistics, provide greater nuance of the picture. ‘When it comes to the issue of elite and mass [sport], there are probably a lot of opinions. From my point of view, it seems as if elite [sport] contributes to the *possibility* for mass [participation]’ (Secretary General).

On a general basis, it could be claimed that a lot of elements influence the possibility of increasing mass participation. Based on the data gathered for this study, three groups of elements will be presented: (i) the association's economy, (ii) the association's strategies, as well as (iii) additional factors, i.e. in relation to facilities and number of disciplines.

I. Economy

Since the late 1990s, Norway has been among the most successful biathlon nations in the world, for both men and women (Hanstad, 2005, 2007). During the same time, media coverage of the sport has increased. The live coverage from the public broadcaster, Norwegian Broadcasting Corporation, has increased from 55 hours annually in 1999 to 94 hours annually in 2004. World wide TV-channels showed about 300 hours of biathlon a season in 2001/02 and 704 hours a year in 2004/05. The European Broadcasting Union (EBU) found that the accumulative numbers of viewers increased from 223 million in 2001/02 to 507 millions in 2004/05 (Hanstad, 2005). The increased TV coverage and number of viewers could be explained, not necessarily by biathlon success, but by the very fact that TV has covered this sport more all over Europe.

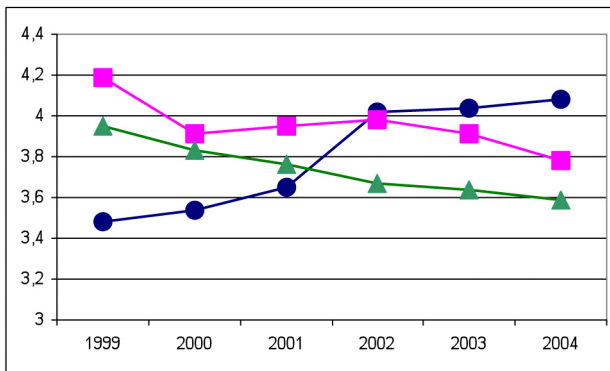


Figure 3 *The population's interest in football (triangles), cross country skiing (boxes) and biathlon (circles).*

However, a representative study of the Norwegian population indicates an increase with regard to the population's interest in biathlon. When asked to identify their interest in various sports, biathlon was ranked number six in 1999 and number one in 2004. Figure 3 shows the devel-

opment of the population's interest in biathlon over a five year period, where biathlon is compared to soccer and cross country skiing, number two and three, respectively, in the 2004 survey (MMI, 2005). With a slightly different formulation in the questionnaire, the respondents were asked to pick the three sports they were most interested in. Again biathlon was number one. However, while 45% of the total sample reported biathlon as one of their top three sports, and 38% reported soccer, there was a remarkable age difference. Among the youngest age group (15-24 years olds), only 17 % reported biathlon as one of their top three sports, while 45 % reported soccer (MMI, 2005).

Although there is a lack of data among youths under the age of fifteen, it seems that interest in biathlon is lower among those who might have been the most natural target group for recruitment in participation terms. Thus, the population's interest in elite sport does not automatically lead to increased activity, and the reason follows a simple logic: biathlon as a media sport is more popular among groups of the population who are less likely to seek a new sport for their own practice. When it is commonly assumed that the population's interest for a sport, combined with TV time and newspaper columns, generates sponsorship, another argument for explaining the increased media coverage as an influence for increased number of participants may occur. From 1994 to 1999 the NSSF increased the annual sponsor income from about 250,000 euro to 437,500 euro (or from 2 to 3.5 million Norwegian kroner). That was not considered, by the leadership of the NSSF, to be enough even for the elite team alone. From 1999 to 2004, the income doubled more than three times, to about 1,5 million euro (12 million Norwegian kroner, see Figure 4).

From what is outlined above, it may seem that international performances increase the media coverage and the population's interest, which in turn increases the market value and the level of sponsorship. The increased level of sponsorship income has given the NSSF much better economy, and consequently the association has the opportunity to spend more money, also on mass sport, if the leadership gives priority to it. Green and Houlihan argue that both elite performances and mass participation are – independent on each other – significantly related to the association's priority (Green & Houlihan, 2005). Regarding prioritizing in NSSF, most of the money is re-allocated to the elite teams, but money is also made available for other parts of the association, such as the edu-

cational system for volunteers, with the aim of providing biathlon for young people.

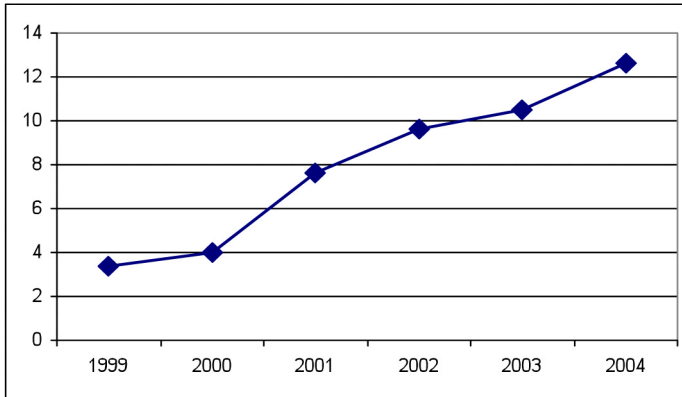


Figure 4 NSSF's sponsor income (millions Norwegian kroner).

In sum, the positive economical development for the NSSF has made it possible to provide for other groups than the elite teams. In better economic times, this balance between the elite and mass parties of the NSSF could be increased, by focusing on incentives for mass sport and in particular by developing strategies for recruitment.

2. Strategies

The leadership of the NSSF experienced, in line with the above mentioned data, that elite achievements do not automatically generate mass participation. As a former president of the NSSF stated: 'We were sure that the success in 1998, and the fact that the World Championship would be arranged in Norway in the following years, would lead to immediate positive effects on mass activity. It did not happen, what we hoped? According to this informant, and his colleagues in the NSSF leadership, mass sport had to be prioritized more concretely, if the policy should make any impact on the number of athletes. And especially after 2002, the NSSF has focused on recruitment (NSSF, 2002).

The recent buoyancy in the commercial viability of the NSSF has made it possible for the association to create incentives for the development of the grass roots of the sport. For example, the NSSF has taken several steps to stimulate club work, because it is the representatives (coaches

and leaders) of the clubs who meet the youth who want to become biathletes in face-to-face interaction. 'Recruitment is in my opinion mainly dependent on two persons. Those two are found in the sport club. The first and most important is the coach, who has skilled qualifications. The other is the leader who provides good administration' (Secretary General).

Consequently, someone to support the volunteers in the clubs were considered valuable. In 2002, the position of 'District Developers' was created, and today there are people engaged in paid (by the NSSF) part time positions all over the country. They are responsible for following up and advising established clubs in their region, and to stimulate and facilitate for new clubs to be established. Priority is given to the education of leaders and coaches, a task which used to have rather less emphasis. As the coordinator of the district developers in the central staff of the NSSF conceded in an interview: 'We have conducted education for coaches and leaders before, but we have to admit that this has been rather half hearted'.

Today, there is an established educational system for coaches, from the lowest level to elite level, with four steps. The courses are often arranged for parents who already bring their son or daughter to the training in a biathlon club. In this respect, the NSSF cooperates with the Norwegian Ski Association, which is a significantly larger sport federation (under the NOC umbrella), with 152,000 members, and which has a well developed structure of district associations and local clubs. Of course, there are many similarities between cross country skiing and biathlon, and the NSSF has gained access, and is given the opportunity, to avail itself of the material used in the educational system of its larger peer. In addition, many biathletes have started their careers as cross country skiers. In that respect, biathlon recruits many of its participants from cross country skiing, but it has another and higher threshold than its bigger brother. Both economic costs and legal restrictions associated with the obtaining of a firearms weapon may be perceived as obstacles for many parents.

It is a big difference between organizing activity for ten kids in biathlon and in for example football (soccer). We have the handling of a gun, the security aspect and registration of a weapon to every single athlete. Many of our clubs are therefore careful about recruiting new members (Secretary General).

To make the sport more accessible, most of the clubs have bought weapons which can be borrowed by the newcomers, until they decide whether to continue on a regular basis and buy their own weapon. The biathlon clubs' obtaining of weapons is made possible by subsidies from the NSSF. In addition, at the level above, more subsidies are available from the state to the association, because of new rules about the gambling revenues which came in 2004 (KKD, 2005a). These new rules open for applying for support not only to traditional facilities but also for equipment. This (public sector) money is additional to the already mentioned increased (commercial sector) income to the NSSF, due to sponsorships.

As mentioned above, biathlon has been a male dominated sport. The NSSF has acknowledged that fact, and has prioritised the recruitment of women biathletes and coaches (NSSF, 2002). In 2005, the NSSF employed a woman in a full time position, to follow up the recruitment of girls and to stimulate girls to take up biathlon. This focus on girls has, at least in a short time perspective, gained results. During the NSSF's summer camp for coach education of the second highest level of the education ladder of the NSSF in 2005, nine out of 41 participants were women, compared to two out of 40 in 2004.

In sum, the increased participation in biathlon may – partly – be explained by intentional actions, strategies and incentives, made by the leadership of the NSSF. Critically, it could be discussed whether a doubling of the number of participants at the mass level is an overwhelming development, as long as the income of the association has multiplied (see figures above). In addition, it is impossible to measure the impact of each of the incentives provided by the NSSF, and there could be more factors than those outlined so far. That is, causes have multiple effects and effects become partial causes. The aim is to recognize this involvement, as far as is possible; therefore a note on additional factors is needed.

3. Additional factors

In congruence with a perspective with emphasis on complex and multiple causes, other elements – in addition to the planned and intentional strategies of the NSSF – that may influence the recruitment of mass participants of biathlon may exist. First of all, on a rather general basis, facilities are crucial for all kind of sport participation. While the number of approximately 130 facilities for biathlon in Norway has been quite stable

over the recent past, and is – in a nationwide perspective – considered as enough for further recruitment (the exception is the area of the capital city, Oslo), there has been an ongoing and comprehensive refurbishment of existing facilities over the last few years.

Another aspect that is neither a typical Norwegian phenomenon nor unique for biathlon, but rather a general development of international sport, is that the number and types of disciplines within individual sports have increased. In 1997, ‘pursuit’ was introduced in the World Championship, and it was included in the Olympic programme in 2002. The athletes start in intervals based on the result from the normal sprint (usually arranged the day before), and the first one to cross the finish line is the winner. In 1999, ‘mass start’ was introduced in the World Championship and included in the Olympic programme in 2006. Everybody starts together, and – of course – the first athlete to cross the line is the winner. In addition, during the 2004/2005 season two new disciplines were introduced: ‘mixed relay’ with two females and two males in each team (which has been a World Championship discipline since 2005); and a ‘show sprint’ with two parts, a qualifying and a final race.⁶ This development has – so far – made the sport more attractive and understandable for spectators; it may also make the sport more attractive for potential new recruits.

Concluding remarks

It appears from the data provided in this paper that international elite performances by Norwegian biathletes and the number of participants in the Norwegian Biathlon Association do correlate. That may be identified as indicators of a relationship between elite sport and mass sport, but at the same time, it is pointed out that elite performances cannot be taken into account as the sole contributor for growth at the lower level. In that respect, there have been quite deliberate attempts to increase mass participation through various other programmes and incentives, such as a well functioning structure of district associations and local clubs, educated leaders and coaches, accessible equipment and facilities, and special efforts targeted towards specific groups, e.g. women.

The apparent distinctive groups of elite sport participants and mass sport participants are all members of the NSSF; thus the elite athletes

6 <http://www.skiskyting.no/t2.aspx?p=22369&q=p>.

and the mass participants can be considered as figurations within a larger figuration, and as subgroups of the same complex unit. In that respect, it should be emphasized that, if there is a relationship between elite performances and mass participation in biathlon, the relationship is not direct and easily explained. The relationship between elite sport and mass sport in Norwegian biathlon may be explained by a detour via other interrelated factors such as economy and strategies. It is not believed that elite sport creates mass sport *per se*. In sum, this article has shown that elite sport *may – indirectly –* generate mass sport, but it depends on the economy of the sport governing body and priorities made by its decision makers. It is indicated that an increased balance between the elite sport party and the mass sport party of a sport depends on the priorities made by decision makers in the focal organization, in this case the Norwegian Biathlon Association (NSSF).

However, two critical points should be added to the claim about priorities. First, the increased focus on strategies for incentives of recruitment and mass participation would probably not have been prioritized if the association had been in financial straits. It is probably still the elite teams that are prioritized, and the mass sport is 'prioritized' if and only if the elite teams' requirements are fulfilled. In that respect, it could be discussed whether it is a premise for an apparently increased balance between the elite and mass parties of the focal association, the elite team always weighs heavier than its mass participants. It is, however, the job of the sport governing body to keep the balance, as long as it is a defined goal to benefit both.

Second, it should be emphasized that the notion of mass sport is rather relative. Compared to the point of departure in the mid 1990s, today's number of members of the NSSF indicates an increase in mass participation. However, compared to the largest sport federations in Norway, the Football Association with 350,000 members and the Ski Association with some 150,000 members, respectively, the NSSF with 5,000 members is a small federation (NIF, 2006). In that respect, being on the lower half of the list of sport federations in Norway (ranked after number of memberships), it could be discussed whether biathlon is a mass sport at all. Moreover, an additional comment emerges, namely that there is apparently no connection between the ranking of TV popularity for a sport (where biathlon is number one) and its size measured in number of participants. Again, any relationship must be detoured by a complexity of elements, including economic, strategic and other factors.

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