

combining elite sports & education

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1. Introduction

The European Youth Olympic Festival (EYOF) was held in the city of Utrecht in the Netherlands from 14–19 July 2013. In cooperation with the EYOF organisation, the Netherlands Olympic Committee (NOC) and the European Olympic Committee, the Mulier Institute, centre for research on sports in society, conducted a study among the EYOF 2013 sports participants.

All 2,271 athletes were asked to fill out a short questionnaire, distributed to the chefs de missions in seven different languages by the NOC Service Centre.

The content of the questionnaire was twofold, with questions on the evaluation of EYOF 2013 and on participants' experiences combining elite sports practice and school.

The study contributes to the international body of knowledge on the comparison of different Sports Policy factors Leading to International Sporting Success (SPLISS; see references in the appendix). The system of talent identification and development is one of the nine identified pillars influencing national elite sports performance. National coordination in organising support for talented athletes to combine elite sports and educational development in secondary school is an important aspect of this pillar.

In several countries initiatives have been developed to optimise the combination of school and elite sports, for example by founding specific elite sports schools.

In the existing SPLISS studies, elite athletes, coaches and performance directors in different countries were asked questions about the elite sports climate and facilities in their countries, but talented young athletes were not included. We regarded the opportunity of questioning EYOF participants as an important possibility to get to know more about the experiences of young athletes in different countries in combining school and sports.

The central question of the study is:

To what extent are EYOF participants satisfied with EYOF 2013 and how do talented athletes from different countries and sports perceive support in optimising academic and sports development?



2. Questionnaire and response group

Questionnaires were distributed in seven languages (English, Russian, Italian, French, Dutch, Turkish, German and Polish) based on the number of participants from different countries and their expected knowledge of the English language. The questionnaires took about 15 minutes to complete and were filled out anonymously.

Questions were based on earlier research into support and satisfaction concerning the organisation of elite sports events and on research into talent development and education. Most questions were scale questions with ratings from 1 (very low) to 10 (very high) or scale statements with options 1 (totally disagree) to 5 (totally agree). Furthermore several questions about socio-demographic characteristics were included.

In total 927 completed questionnaires from all 2,271 EYOF participants (41%) were included in the analyses.

Country

The 927 questionnaires were completed in six different languages by athletes from 30 different countries, representing 61 percent of all 49 participating countries, see table 2.1.

Most respondents live in Slovenia, Belgium, the Czech Republic or Italy (all 7%, n=64–67), see Table 1.1. Only one respondent each from Poland and the Republic of Serbia completed a questionnaire. No questionnaires in the Polish language were returned, explaining the low number of Polish respondents, which represented four percent of the total population of EYOF participants. Other largely underrepresented countries among the respondents are Russia and Germany, from which no completed questionnaires were returned. After the Netherlands and Italy, the Russian athlete delegation was the third largest (n=107; 5%) and Germany was the sixth largest athlete delegation (n=98; 4%).

Table 2.1 Country of residence of EYOF respondents, as a percentage of total respondents (N=927) and total participants (N=2,271)

	Respondents (N=927)	Total participants (N=2,271)
Slovenia	7	3
Belgium	7	3
Czech Republic	7	3
Italy	7	5
Finland	5	3
Netherlands	5	6
Ukraine	5	3
France	5	5
Belarus	5	3
Latvia	4	2
Slovakia	4	2
Turkey	4	4
United Kingdom	4	2
Switzerland	4	2
Lithuania	4	2
Spain	4	2
Estonia	3	2
Croatia	3	2
Portugal	3	1
Greece	2	2
Denmark	2	2
Luxembourg	2	1
Iceland	1	1
Sweden	1	2
Albania	0	0
Malta	0	0
Andorra	0	0
Liechtenstein	0	0
Poland	0	4
Serbia	0	3

Sports

All nine EYOF sports were represented among the respondents, with the largest group of respondents (27%) participating in athletics (track & field), followed by swimming (16%), judo (13%) and cycle racing (12%, see Figure 2.1). Track & field and cycling respondents are somewhat over-represented compared to the division of sports among all EYOF participants. The team sports participants in handball (5%) and, to a lesser extent, in basketball (5%) were under-represented among respondents compared to their share among all EYOF participants. This can partly be explained by the absence of German, Norwegian and Russian athletes among respondents.

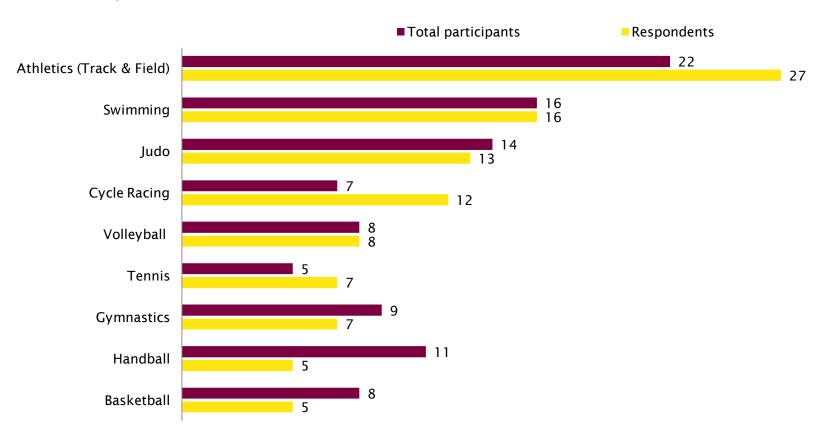


Figure 2.1 Comparison of EYOF participants and questionnaire respondents by type of sport, in %

Gender, age and school situation

Respondents were about equally divided among both genders (girls 51%; boys 49%).

Most respondents were 15 (28%) or 16 years old (42%). The 12–14-year-olds made up 13 percent of all respondents and 17 percent were 17 or 18 years old (Figure 2.2).

The age distribution differentiated across sports, see Figure 2.3. In athletics, most of the respondents were 15/16 years old (95%) and none of them was 17/18 years old. In volleyball the 17/18-year-old respondents predominated (69%) while none of them was under 15 years old. In most sports 12 to 14-year-olds made up less than ten percent of the group. Swimming (41%), gymnastics (29%) and tennis (29%) had a relatively large proportion of young athletes.

Most respondents were enrolled in education in the 2012/2013 school year, prior to EYOF 2013. About three in four respondents were students at a secondary school. Half of this group were in lower or middle secondary education; the other half in higher secondary education. About 20 percent just finished primary education prior to competing in EYOF. Seven percent were in vocational education and three percent went to college/university. One percent (N=4) were not enrolled in any form of education; these were two 16-year-olds and two 17-year-olds from Estonia, Slovenia and Switzerland.

Figure 2.2 Age of respondents

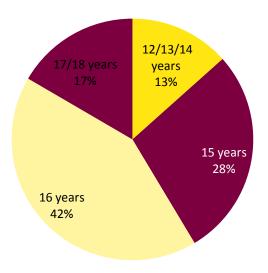
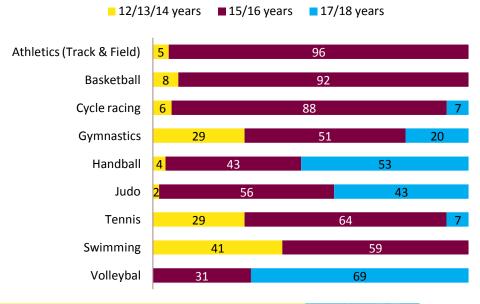


Figure 2.3 Age by type of sport



Living situation

Most respondents (89%) lived with their parents and/or other relatives. Nearly one in ten athletes (also) lived with other elite athletes (n=85), for example during the week. Seven percent (n=69) lived at a boarding school (e.g. elite sports school) and one percent with a guest family. 17 athletes indicated that they both lived at a boarding school and with other athletes.

Countries in which athletes most often live with teammates or other athletes are the Netherlands (31%), Italy (25%) and Finland (20%). Athletes from Belgium (39%), Ukraine (29%) and France (27%) most often live at a boarding school. In the team sports basketball (40%) and volleyball (38%) athletes most often live together and/or live at a boarding school, followed by tennis (17%) and cycle racing (16%).

Most of the athletes living at boarding school and/or with other athletes were 15 or 16 years old; 17/18-year-olds in particular lived with other athletes relatively often (21%).

Training hours a week

The majority of the respondents (57%) spend 10–19 hours a week training and competing in their sport, with 16 percent practising less than 10 hours a week and a quarter practising at least 20 hours a week (Figure 2.4).

 Table 2.2 Living situation of respondents (multiple responses possible), in percentages

 with parents/other relatives
 89

 with teammates/elite athletes
 9

 at boarding school
 7

 with guest family
 1

 on my own/with friends
 1

Figure 2.4 Training hours a week

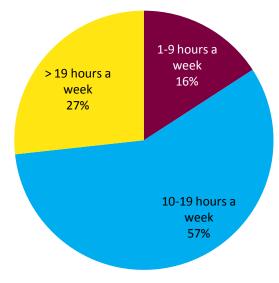


Figure 2.5 Training hours a week, by age

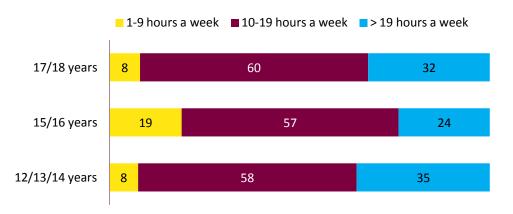
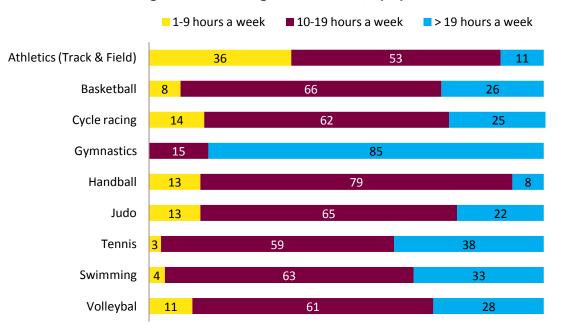


Figure 2.6 Training hours a week, by sport



Training hours by age and sports

Contrary to expectations, the 12–14-year-olds practised their sport more than 19 hours a week, as often as 17/18-year-olds did (Figure 2.5).

Among 15/16-year-olds a relatively large group (19%) practised 1–9 hours a week.

These differences in training hours by age can be explained partly by the sport-age related differences, presented before (Figure 2.3). Notably, 85 percent of all gymnasts spent 20 hours or more on their sport a week, while none of the gymnasts spent less than ten hours a week on their sport (see Figure 2.6). Among track & field athletes (of whom 96% were 15/16 years old) 36 percent practised less than ten hours and only eleven percent practised 20 or more hours a week.

3. Results

3.1 Evaluation of EYOF 2013

The 927 EYOF participants rated the overall organisation of EYOY 2013 as good with a mean grade of 7.7. The young athletes were most satisfied with the competence and helpfulness of the volunteers (8.5) and with the organisation of their own sport (8.1), see Figure 3.1. Athletes were least satisfied with the catering facilities (6.2) and transport facilities (7.2).

Figure 3.2 shows similar results with more specifications in the number of participants who were very satisfied or unsatisfied. Six out of ten athletes rated the overall organisation as very good (grade 8–10). Thirteen rated the overall organisation with grades 1–5. With eight out of ten athletes evaluating the volunteers as good/excellent (8–10), one in three athletes was very satisfied with the catering. More than a third of the athletes rated the catering facilities as unsatisfactory (1–5) and a quarter was not satisfied with the transport facilities.

Figure 3.1 Evaluation of EYOF 2013, mean rating (1 very unsatisfied -10 very satisfied)



Figure 3.2 Evaluation of EYOF 2013, in percentages satisfied/unsatisfied

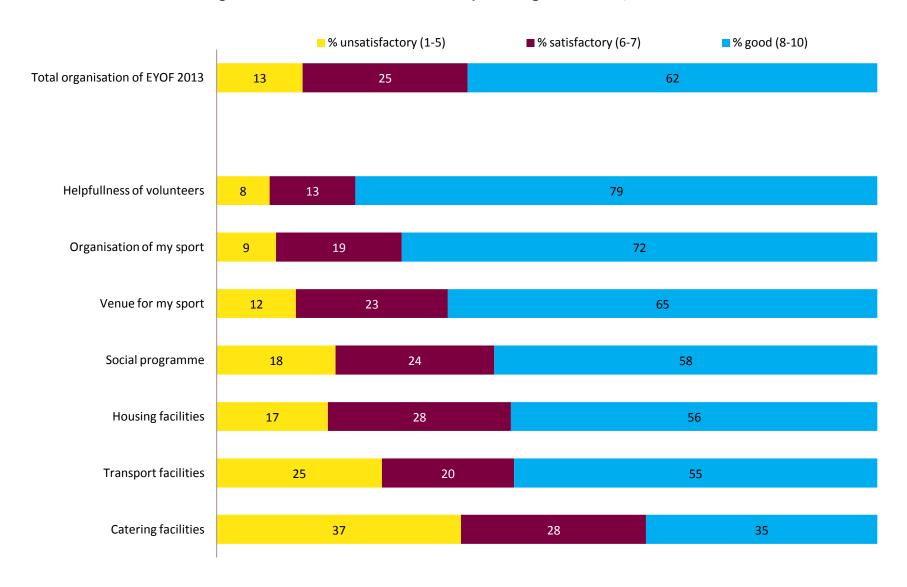
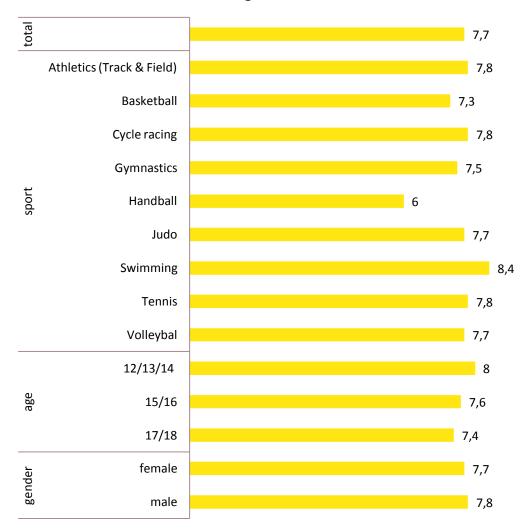


Figure 3.3 Mean rating of the overall EYOF organisation (1 very unsatisfied to 10 very satisfied), by sport, age and gender



Evaluation EYOF by sport, age and gender

There were some sport specific differences in the rating of the overall organisation, with handball athletes being the least satisfied (6.0) and swimmers being the most satisfied (8.4).

Figure 3.3 also shows that, in general, younger athletes were more satisfied than older athletes. Boys and girls were about equally satisfied with the EYOF organisation.

With respect to catering and transport facilities, we found similar differences according to sports, age and gender (not shown in figure).

By sport, the rates for catering facilities varied between 5.5 (handball) and 6.6 (judo). Larger sport-specific differences were found with respect to transport facilities, with the lowest grades given by handball players (5.1) and tennis players (6.0) and highest grades given by track & field athletes (8.2) and swimmers (7.3).



Promotion of Olympic values

Most respondents agreed that EYOF promotes the core values of Olympism. On a score of 1 (lowest) to 10 (highest), the mean score for all five values was more than 8, with only minor differences. The participants gave the highest score for peace (8.5) and the lowest for fairness (8.3).

Of the countries with more than 25 participants, the lowest peace scores were given by respondents from the Netherlands (7.6), Belgium (7.7) and Croatia (7.7), and the highest scores by Lithuania and Belarus (both 9.5). Similar country-specific differences were found for the other Olympic values. Furthermore, as with the other EYOF evaluation scores, younger participants were more positive than older participants.

Table 3.1 Extent to which participants believe EYOF promotes core values of Olympism (score 1-10), mean value

Peace	8.5
Respect	8.4
Friendship	8.3
Excellence	8.3
Fairness	8.3

Figure 3.4 Age at which participants started practising ten hours or more a week

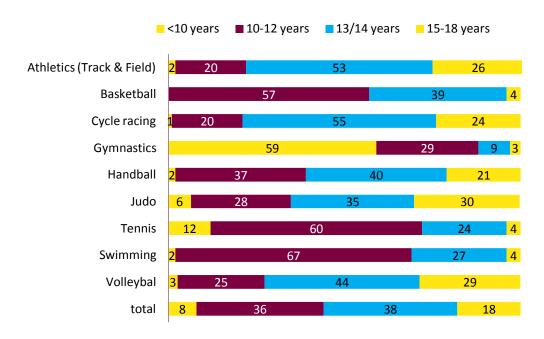
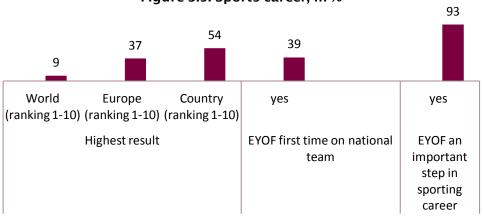


Figure 3.5. Sports career, in %



3.2 Sports career

Starting age for practising ten hours a week

The respondents that practised at least ten hours a week (84%) started to do so at a mean age of 12.5. Nearly half of the respondents started to practise ten hours or more before they turned 13, but this differed by sport (Figure 3.4).

Most gymnasts were younger than ten years old when they started to train at least ten hours a week. In swimming, basketball and tennis most participants were between 10–12 years old. In all other sports there was also a relatively large group of athletes (20–30%) that started to practise ten hours or more a week at age 15 or 16. Only two athletes started at 17 or 18 years old.

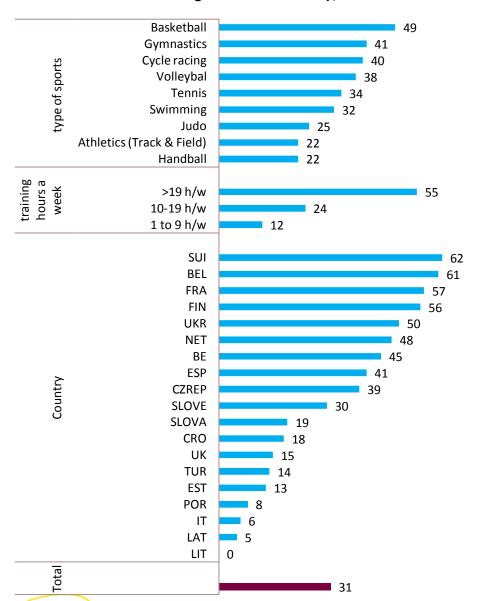
Highest level of success

The most common highest achieved level of success among the respondents was a national top-10 ranking (54%; Figure 3.5). More than one in three athletes (37%) achieved a top-10 ranking at European level. One in ten participants had reached a worldwide top-10 ranking. A relatively large number of cyclists had only been successful at national level. Tennis players had most often reached a world top-10 ranking (19%).

Participation in EYOF 2013

39 percent of all respondents represented their national team for the first time during the EYOF. For 83 percent, a nomination to participate in EYOF was the main goal for the season. Furthermore, more than 90 percent regarded participation in EYOF as an important step in their sporting career.

Figure 3.6 Students enrolled in secondary education at a special school for talented young athletes, by sport, training hours and country, in %



3.3 Educational career and satisfaction

Special secondary school for talented young athletes
Nearly one in three participants was enrolled in
education at an elite sports school (ESS).
Switzerland had the most EYOF participants enrolled in
special secondary schools for elite sports (62%),
followed by Belarus (61%), France (57%) and Finland

followed by Belarus (61%), France (57%) and Finland (56%, see Figure 3.6). Nearly all participants from Portugal, Italy, Latvia and Lithuania indicated that they were enrolled in secondary education at mainstream schools.

Apart from country-specific differences, hours of practice and type of sport practised also clearly influence the chance of being enrolled in an ESS. Among those participants training at least 20 hours a week, more than half attend an ESS.

In terms of the sports themselves, basketball players (48%), gymnasts (41%) and cyclists (40%) were most likely to be students at an ESS. Track & field athletes and handball players were least likely to go to an ESS.

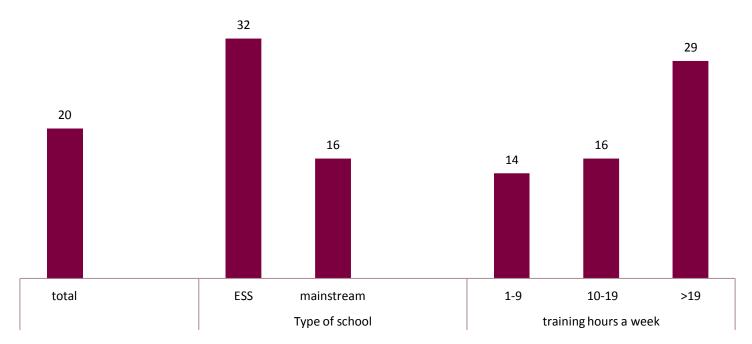


Figure 3.7 Lower level of education due to elite sports practice, in %

Secondary school career

One in five respondents indicated they chose a lower level of education in connection with practising an elite sport (Figure 3.7). Students at an ESS (32%) and those training more than 19 hours a week (29%) were more likely to have chosen a lower educational level.

Six percent indicated that they had to repeat a year at a secondary school due to their sports career, boys twice as often as girls. Not surprisingly, the chance of having to repeat a class also increases with age.

School motivation

Most of both ESS and mainstream secondary school students (and their parents and coaches) indicated that they find it important to achieve good school results and to achieve the highest possible level of education. Simultaneously, about half of all students indicated they do not like to go to school and are not very motivated to do their homework. One in three student athletes, occasionally skip school, irrespective of type of school.

As can be expected, more students at an elite sports school stated that their school devotes a lot attention to their sports performances (83%) compared to students at a mainstream secondary school (55%).

Mainstream secondary school ■ Total ESS It is important for me to achieve the highest possible level of education 95 95 96 Good school results are imporant I like to go to school 49 49 Most of the time I am motivated to do my homework 49 I sometimes skip school It is important for my parents that I do my best at school 86 86 86 It is important for my sport trainers/coaches that I do my best at school 64 My school devoted a lot attention to my sports performances 83 55

Figure 3.8 Educational motivation of sports students, by type of school, in % (strongly) agree

Facilities at school

As expected, there are more special facilities for talented athletes at elite sports schools than at mainstream schools (Figure 3.9). However, also mainstream schools offer several facilities to their athlete students to support them in combining an educational career with elite sports.

Special leave for national/international is the most commonly available and used facility (77%), both for ESS students (89%) and mainstream school students (70%).

E-learning/ distance learning is the least available facility at both types of school. Nearly half of the ESS students and three quarters of mainstream school students indicated that their school does not offer that facility.

For both types of school, the percentage for all facilities which are available but not used, is rather low. Support of a study coordinator is most often mentioned as available but not used (20%).

The largest differences between ESS students and mainstream school students regarding the availability and use of facilities concern time to practice during school hours (78% vs 25%) and training facilities at school (60% vs 21%).

Figure 3.9 Extent to which facilities are available at school for talented athletes, by secondary school (in %)

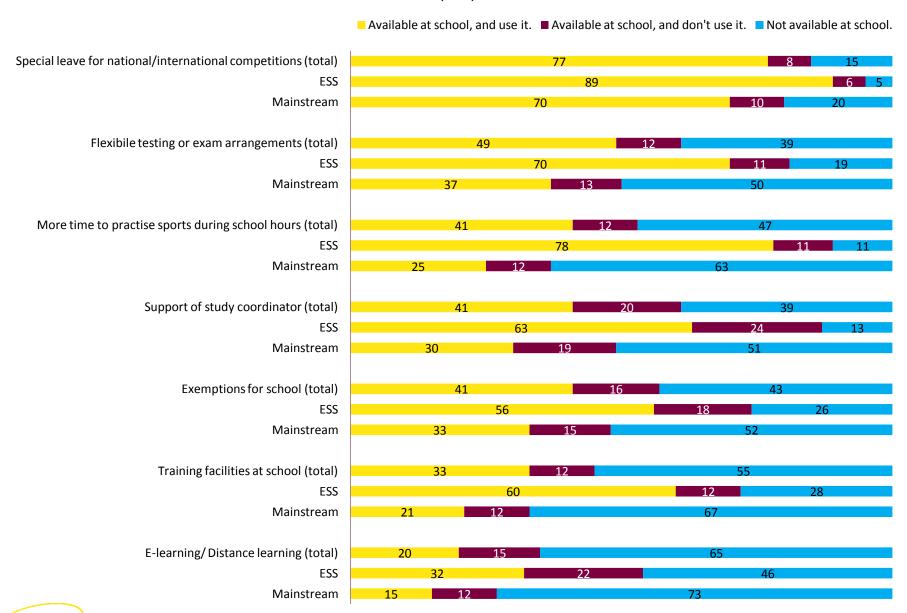
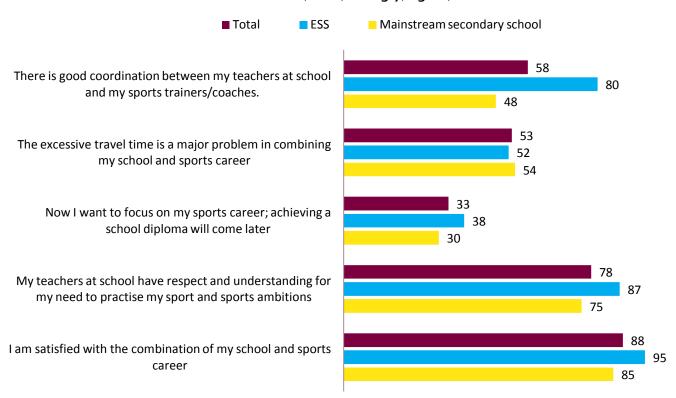


Figure 3.10 Satisfaction with (support for) the combination of elite sports and school (in % (strongly) agree)



Combining school and elite sports

As expected, more ESS students (80%) than mainstream secondary school students (58%) agree that there is good coordination between the teachers at school and their sports trainers/coaches. For other aspects, differences between these groups were much smaller.

The majority of all students are satisfied with the combination of school and sports (88%) and feel respected by their teachers (78%). Half of both ESS and mainstream school students found travel time a major problem in combining their school and sports career, and a third of all student wants to focus on their sports career and postpone educational aspirations.



Total 23 32 45

ESS 13 28 59

Mainstream 28 34 38

Figure 3.11 Rating of general support in combining elite sports with school (in %)

Satisfaction concerning general support in combining sport and school

There were some differences in the rating for the general support athletes received in combining elite sports activities with school work. The average rating was 6.9.

ESS students are more satisfied with the general support (7.6) compared to mainstream secondary school students (6.6). Figure 3.11 shows that nearly a quarter of all students was not satisfied with the support they receive. More than half of the ESS students were very satisfied with the received support in combining sport and school (59% scored 8–10), while 13 percent were rather unsatisfied (score 1–5), compared to 38 percent 'good' and 28 percent 'unsatisfied', respectively, for mainstream school students.

Both ESS and mainstream secondary school students found that practising sport has a positive impact on their school career (27% positive and 39% very positive; not shown in figure). The mean grade was 6.6 and four out of ten students at both school types were very positive (score 8–10). However, a third of students from both school types found that practising sport had a negative impact on their school career (3% very negative and 31% negative).

Explanatory factors concerning satisfaction for support in combining school and sports

In Figure 3.12 becomes clear that the number of available facilities at school enabling the combination of sport and school are a particularly important predictor of the satisfaction about the perceived support in combining school with elite sports. As we saw earlier (Figure 3.9), the number of available facilities is strongly related to the type of school, but many mainstream schools also offer specific facilities. Students of schools with a maximum of two facilities available are the least satisfied (6.1) and athletes with seven or eight facilities available to them are the most satisfied (7.8).

With respect to type of sport, tennis players are the most satisfied (7.7) and judokas, gymnasts and swimmers are the least satisfied (6.8) group of athletes.

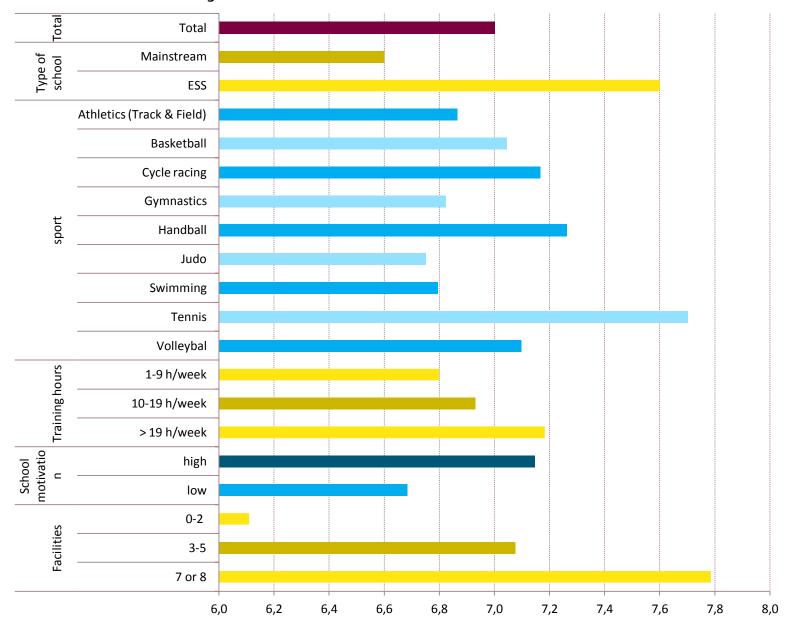
Somewhat surprisingly, we found that athletes with the most training hours (> 20) are more satisfied than those who practice less. It is possible that they can only train so many hours because of the fact that they are highly supported.

Students who are motivated or highly motivated for school are more satisfied than those who are less motivated.

Last but not least, considerable country-specific differences were also found, with Swiss athletes being the most satisfied (8.1) and Greek athletes the least satisfied (4.3), see Figure A3.1 in the appendix.

As several of the above-mentioned factors are related to one another, a linear regression was performed. This analysis confirmed that the number of facilities is the most important explanatory factor for the satisfaction of student athletes concerning their received support in combining school and sports. Other independent positive effects were found for school motivation, playing tennis and being from the United Kingdom, meaning that athletes with a higher school motivation, tennis players and UK athletes are more satisfied with the received support. Country-specific negative effects were found for Denmark, Greece and Turkey, meaning these athletes were less satisfied with the received support in combining school and sports.

Figure 3.12 Mean rating for support in combining sports and school, by type of school, type of sport, number of training hours and school motivation and available facilities





4. Conclusion

The results of our study among 927 respondents (41% of all 2,271 EYOF participants) from all nine sports and 30 countries (61% of all participating countries) showed the following:

EYOF athletes

- * Two-thirds of the participants were 15 or 16 years old.
- * More than half of the athletes spent 10–19 hours a week on training (and competition). Gymnasts most often trained 20 hours a week or more (85% compared to 27% of all athletes).
- * Most athletes agreed that all Olympic values were promoted by EYOF, with peace somewhat more than fairness.

EYOF evaluation

- * In general, athletes were rather satisfied with the organisation of EYOF; the mean score was 7.7 out of 10. They were most satisfied with the helpfulness of volunteers (8.5) and least satisfied with the catering facilities (6.2).
- * Younger athletes tended to be more satisfied than older athletes. With respect to type of sport, swimmers were the most satisfied and handball players were the least satisfied.

Sports career

- * Gymnasts were the most likely to start practising more than ten hours before they turned ten years old. Judokas and volleyball players were most likely to be 15 years or older before spending more than ten hours a week on sports practice.
- * Most participants were active at national level. A quarter had gained a top-10 ranking at European level and about one in ten athletes had gained a top-10 position worldwide.

* For forty percent participating in EYOF was their first international competition. Nearly all participants agreed EYOF was an important step in their sports career.

Educational career and satisfaction about combining school and elite sports

- * Nearly one in three athletes was enrolled in education at a special secondary school for elite sports, especially those training more than 20 hours a week (55%). Basketball players and students from Switzerland, Belarus, Finland and France were also enrolled in elite sports schools relatively often.
- * One in five students indicated that had chosen a lower educational level due to their elite sports involvement, especially ESS students and those with many training hours.
- * Most students indicated that they find it important to achieve good school results and to achieve the highest possible level of education and they are also encouraged by their parents and coaches. However, about half of all students do not like to go to school and are not very motivated to do their homework.
- * The majority of all students are satisfied with the combination of school and sports (88%) and feel respected by their teachers (78%). ESS students (80%) agree more often than mainstream secondary school students (58%) that there is good coordination between the teachers at school and their sports trainers/coaches. Half of both ESS and mainstream school students found travel time a major problem in combining their school and sports career, and a third of all students currently prefer to focus on their sports career and postpone educational aspirations.
- * There were some differences in the rating of the general support athletes received in combining elite sports activities with school work. The average rating was 6.9.
- * Nearly a quarter of all students are not satisfied with the support they receive to combine school and sports. ESS students are more satisfied with the general support (7.6) compared to mainstream secondary school students (6.6). However, the availability of facilities turns out to be the biggest explanatory factor of perceived support satisfaction (PSS). School motivation, playing tennis and being from the United Kingdom were also positively related to PSS, and country-specific negative effects were found for Denmark, Greece and Turkey.





Appendix I References

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Appendix II Tables and Figures

Figure A3.1 Mean rating of received support for combination of school and sports, by country

Table A3.1 Linear regression on satisfaction with received support

Figure A3.1 Mean rating of received support for combination of school and sports, by country (with at least 10 respondents)

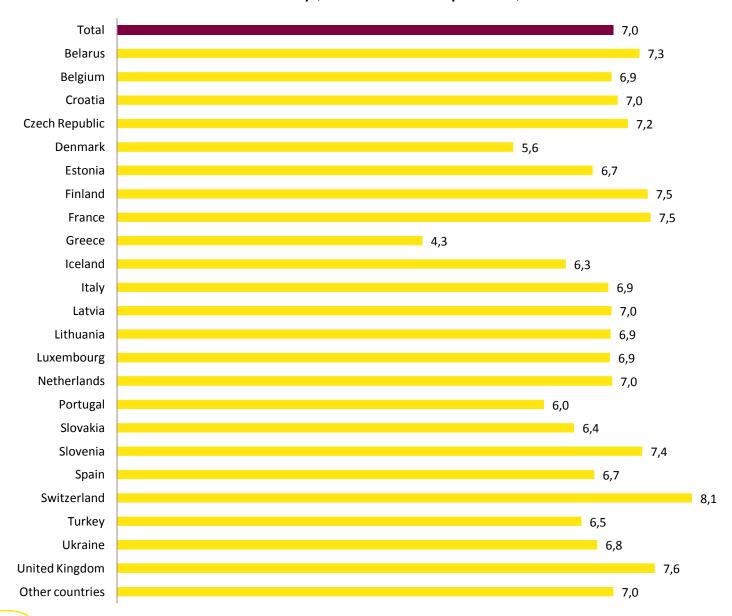


Table A3.1 Linear regression on satisfaction with received support (total adjusted R2 is 18.2%; training hours and age not sig.)

	Beta	t
Constant		16,695***
ESS (mainstream = ref)	0.037	0.904
Facilities (1> 8)	0.318	7.598***
Sports (track & field = ref)		
basketball	-0.025	-0.625
cycle racing	0.038	1.004
gymnastics	-0.043	-1.138
handball	0.030	0.742
judo	-0.059	-1.497
swimming	-0.035	-0.849
tennis	0.074	1.995*
volleyball	0.032	0.776
Country (Netherlands = ref)		
Belarus	0.029	0.739
Belgium	-0.001	-0.028
Croatia	0.020	0.490
Czech Republic	0.020	0.455
Denmark	-0.097	-2.710**
Estonia	0.017	0.449
Finland	0.017	0.447
France	0.082	1.971*
Greece	-0.134	-3.682***
Slovenia	0.001	0.033
Slovakia	-0.043	-1.069
Turkey	-0.086	-2.353*
Switzerland	0.063	1.671
United Kingdom	0.087	2.219*
Iceland	0.000	-0.012
Italy	0.080	1.714
Lithuania	0.040	1.036
Luxembourg	0.024	0.667
Portugal	-0.058	-1.564
Spain	-0.011	-0.292
Ukraine	0.040	0.991
Other countries	0.037	1.054
School motivation	0.121	3.455**
* n < 0.0E, ** n < 0.01, n < 0.001		

^{*} p < 0.05; ** p < 0.01; p < 0.001



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