

Athlete Support Service in Germany

Arne Güllich

- Preliminary Remarks and Introduction
- Description: German System for Support of Elite Athletes
- Evaluation Olympic Support Centres & Elite Sport Schools
- Discussion, Conclusions, Implications

1 Description

GERMANY

-83 Mio inhabitants

-357,104 km²

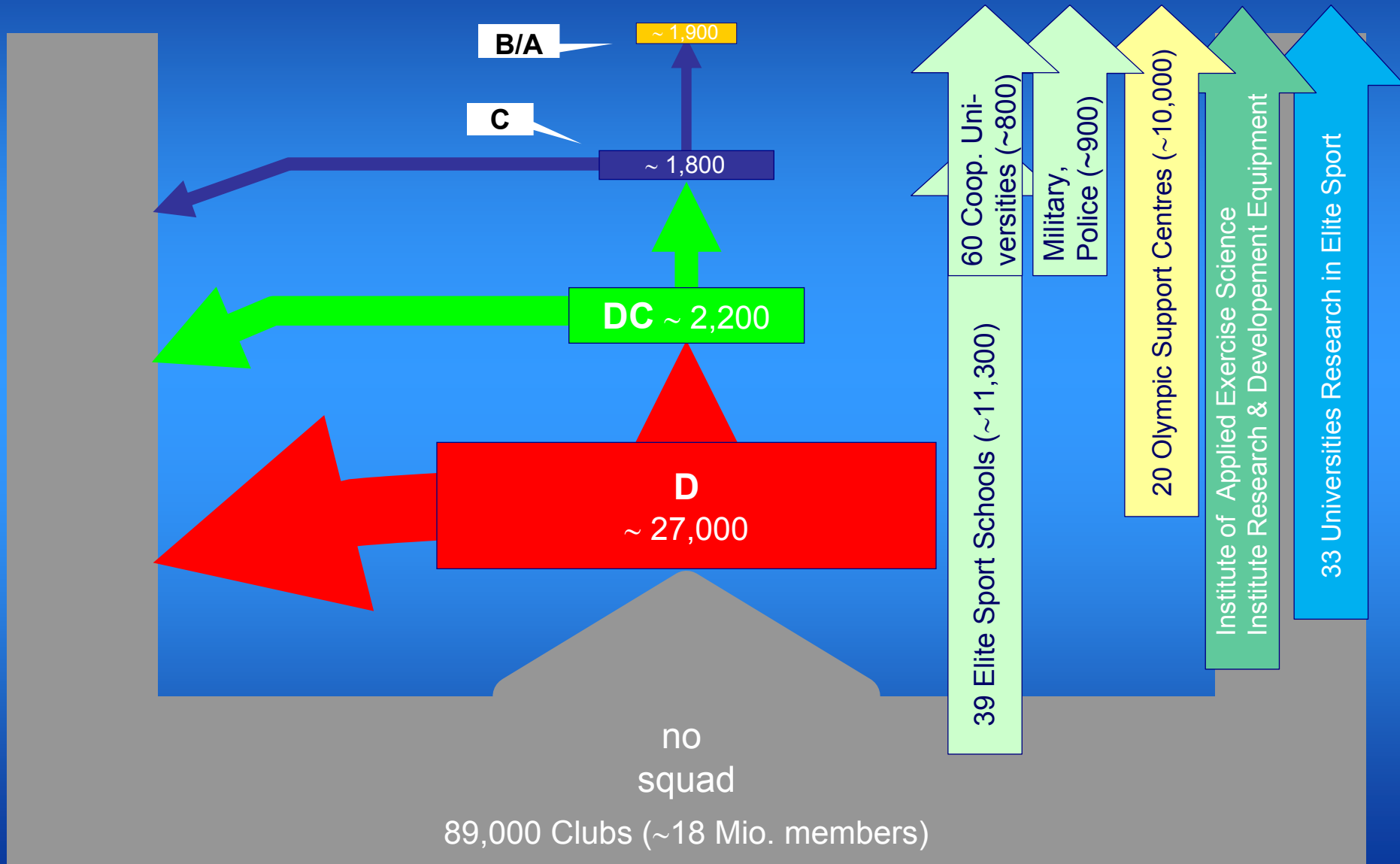
- Olympic Support Centre
- Elite Sport School
- ◆ Institute of Applied Training Science
- ◆ Institute for Research and Development of Sports Equipment
- ◆ Coaches Academy
- University (Research)
- Federal Institute of Sports Science



500 km

500 km

1 Description



Sports Federations: Squads

N=33

~1,400 ft-, ~4,000 pt-coaches

Olympic Support Centres

N=20

~230 ft staff (+ „X“ part time)

Inst. Appl. Training Science;

Inst. Research & Development of Sport Equipment

Elite Sport Schools

N=39

~500 ft coaches, 200 educator

~20 Mio € p.a.

- Competitions
- Additional training (centres, camps, clinics, courses)
- (Para-) Medicine, exercise & movement science, biomechanics
- Psychology
- Management of social environment, career counselling
- International analyses of training and support systems
- Competition analysis, performance diagnosis
- Release (lessons, distance [e-] learning, curriculum dilation)
- Flexibility (schedule, specific training in PE lessons, exam dates)
- Sports coordinator in school
- Boarding facilities

Military, Police

~45 Mio € p.a.

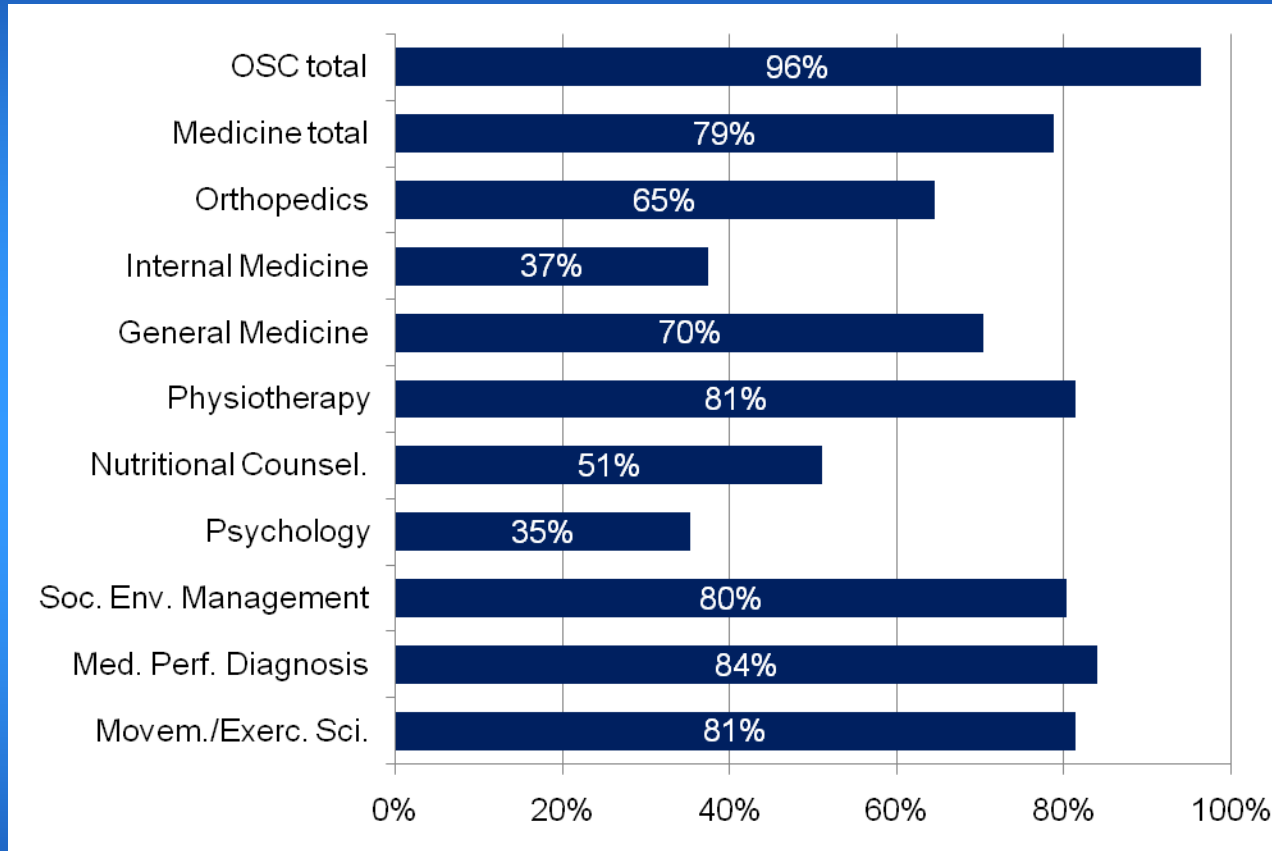
- Reduced duty attendance

Ft = full time; pt = part time

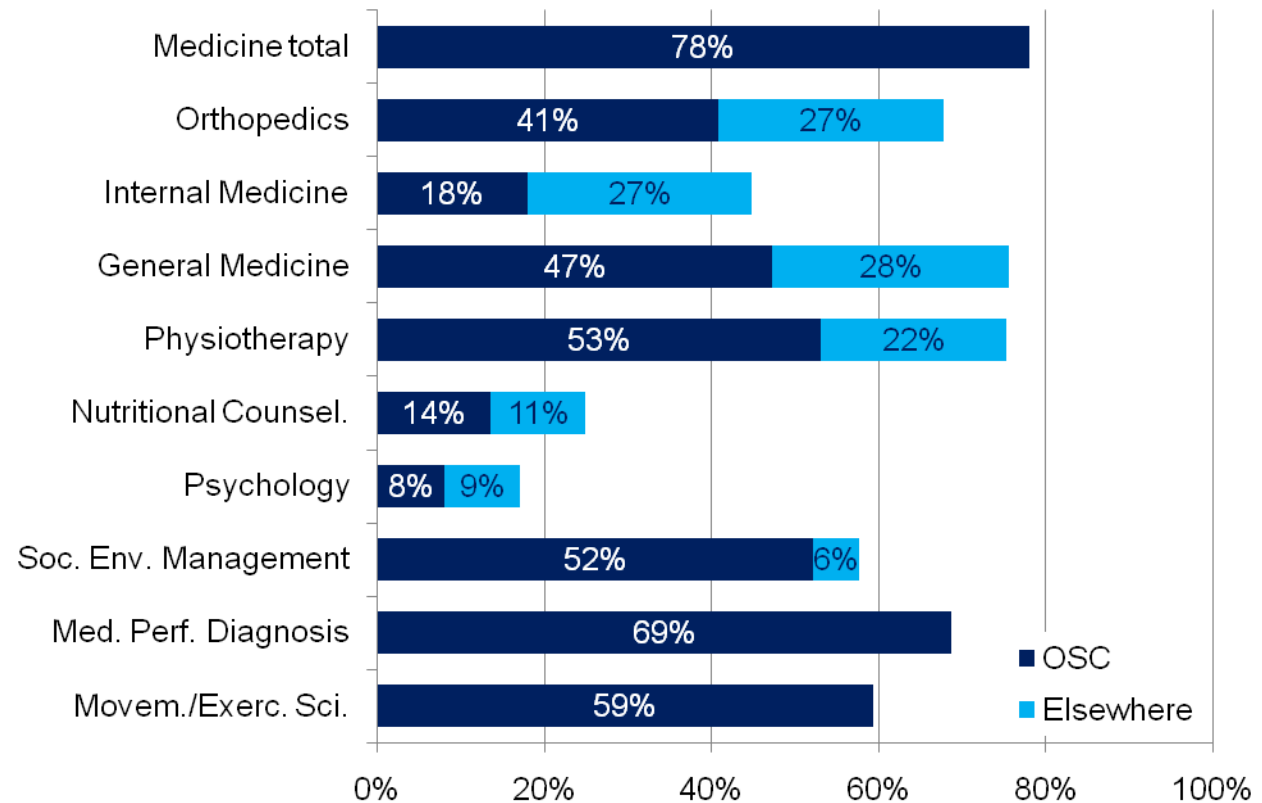
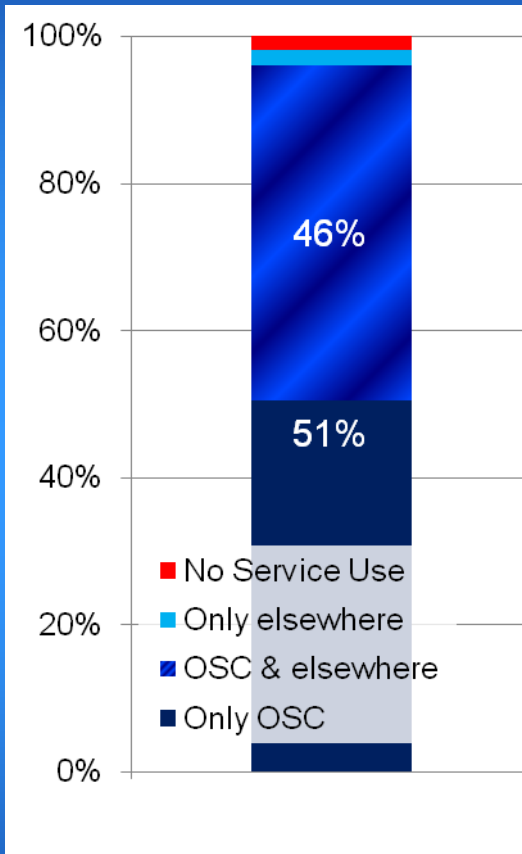
Evaluation of Olympic Support Centres

- Economic (financial) analysis
- Athletes survey (n=1,558)
 - Information about offered services
 - Use of services, intensity of use
(+ reasons if not)
 - Subjective contentment
 - Involvement of coaches
 - Competitive success

Information about Services



Use of Services



Recruitment Age 16.7 ± 4.5 y

Juniors 14.5 ± 2.6 y

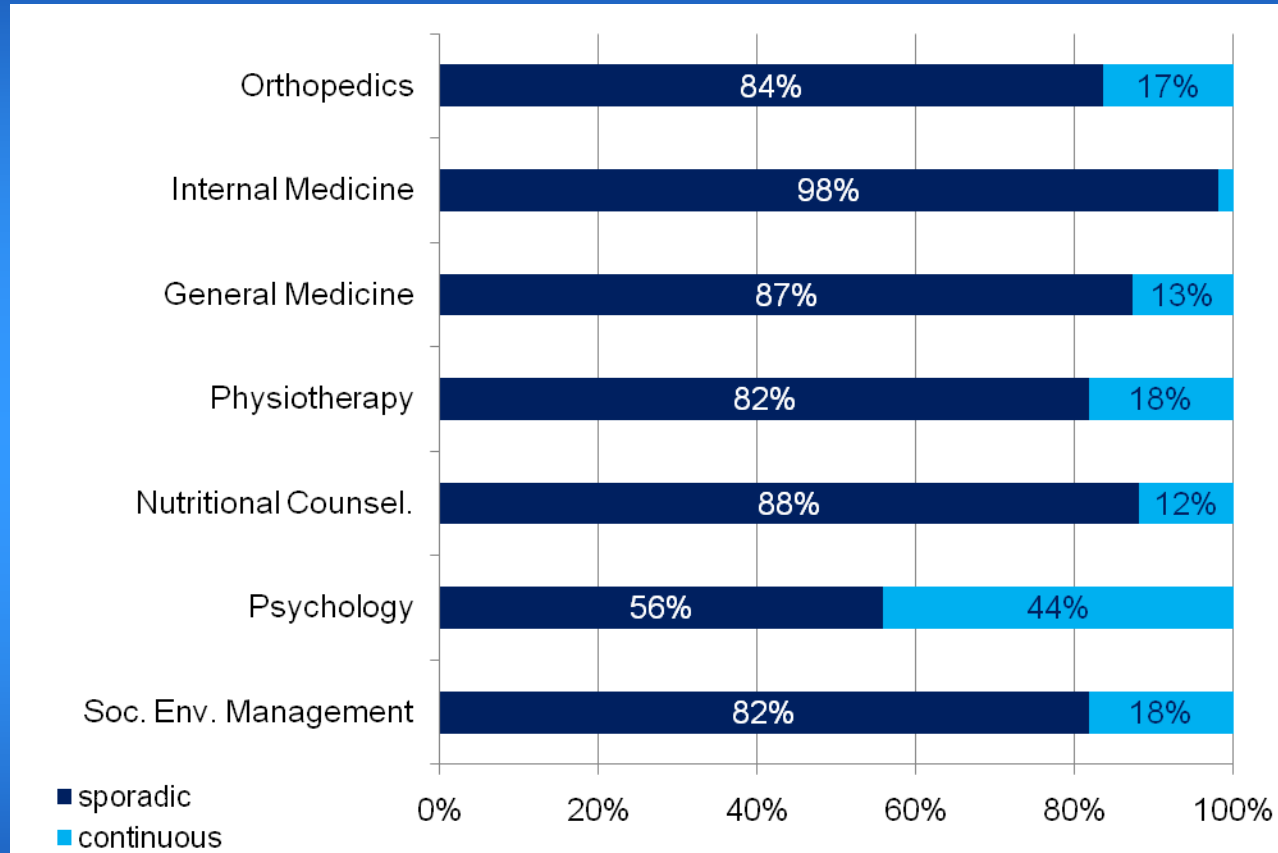
Seniors 19.0 ± 4.8 y

If not, ...

... *most frequent* responses: Use service elsewhere, or not necessary

... *least frequent* responses: Lack of quality, availability, trust, time, etc.

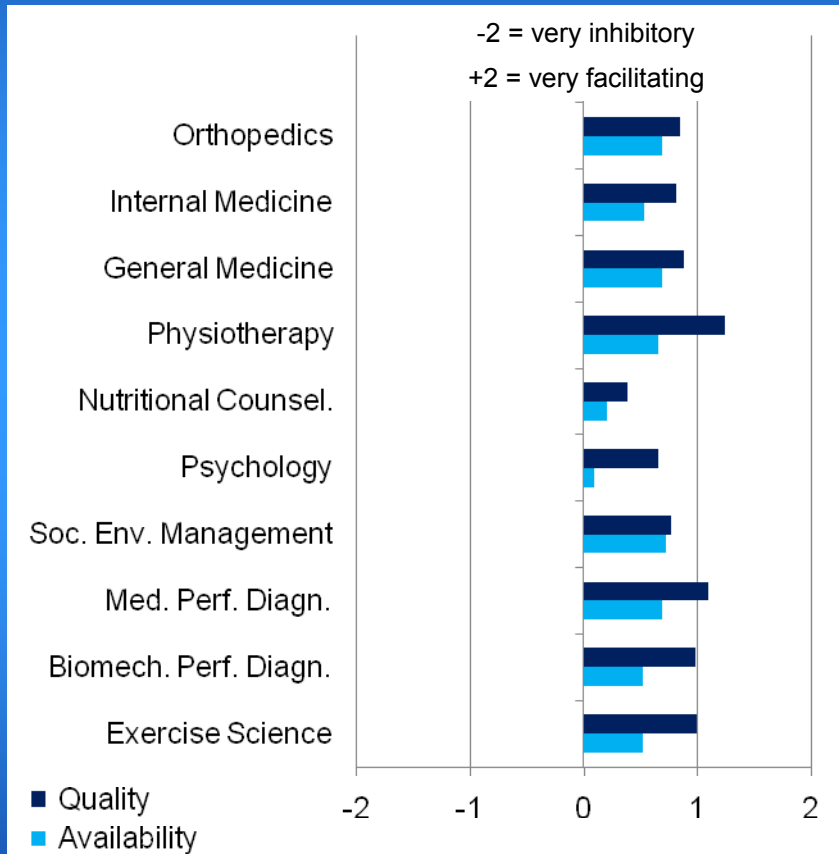
Intensity of Use of Services



Sporadic: <1/week (Physio); <1/month (Med); only at particular occurrences (others)

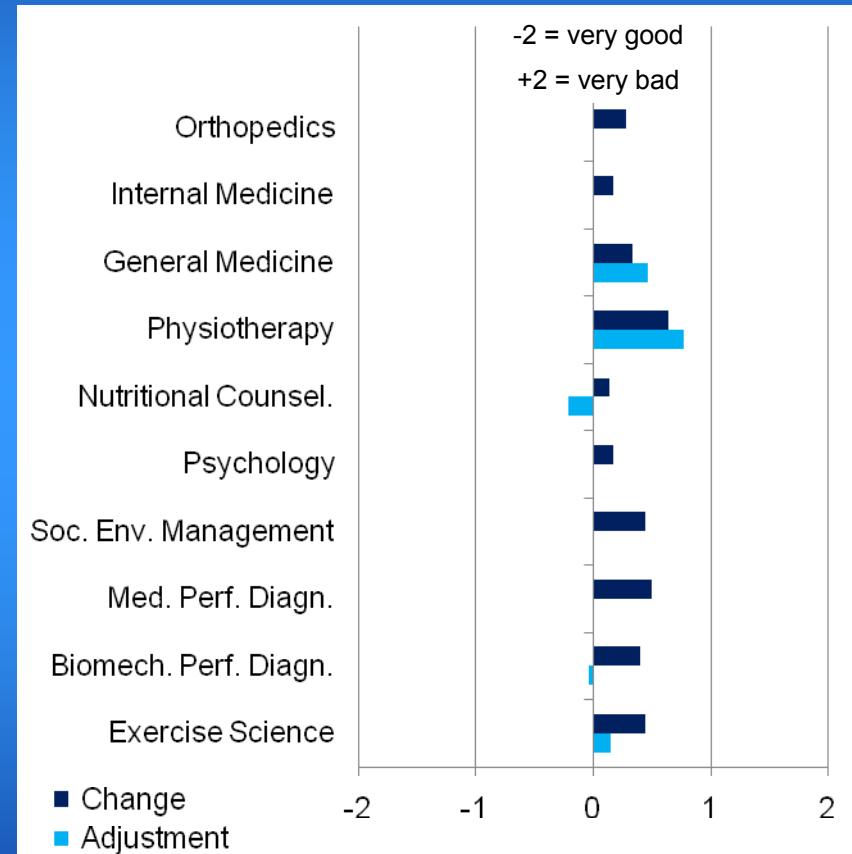
Contentment

Quality & Availability

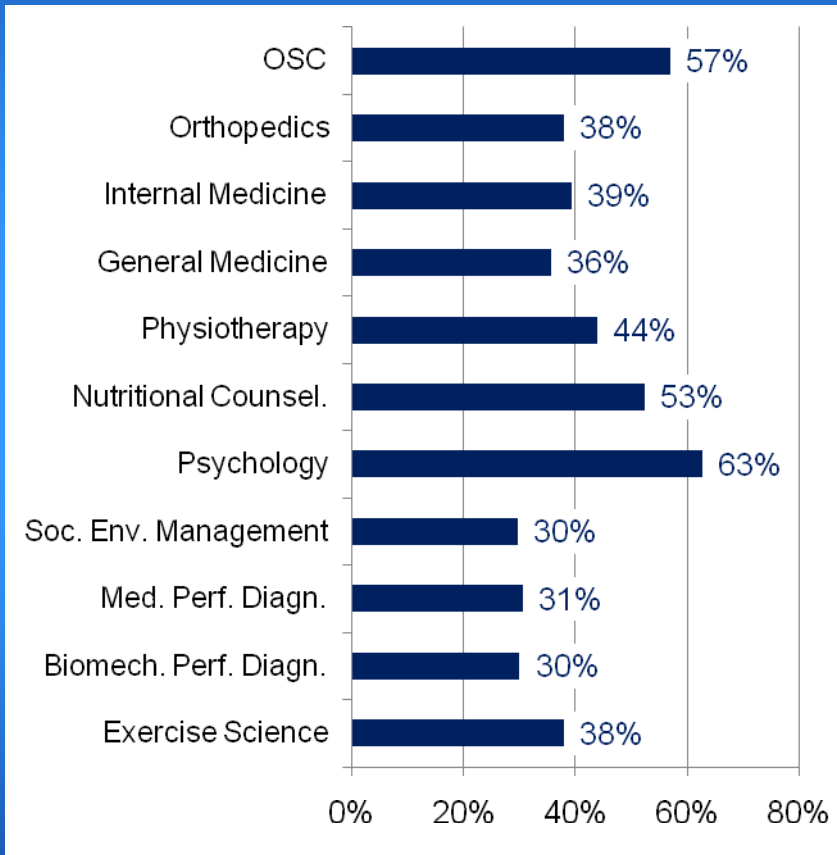


Contentment

Situation Change & Service Adjustment



Involvement of the Coach



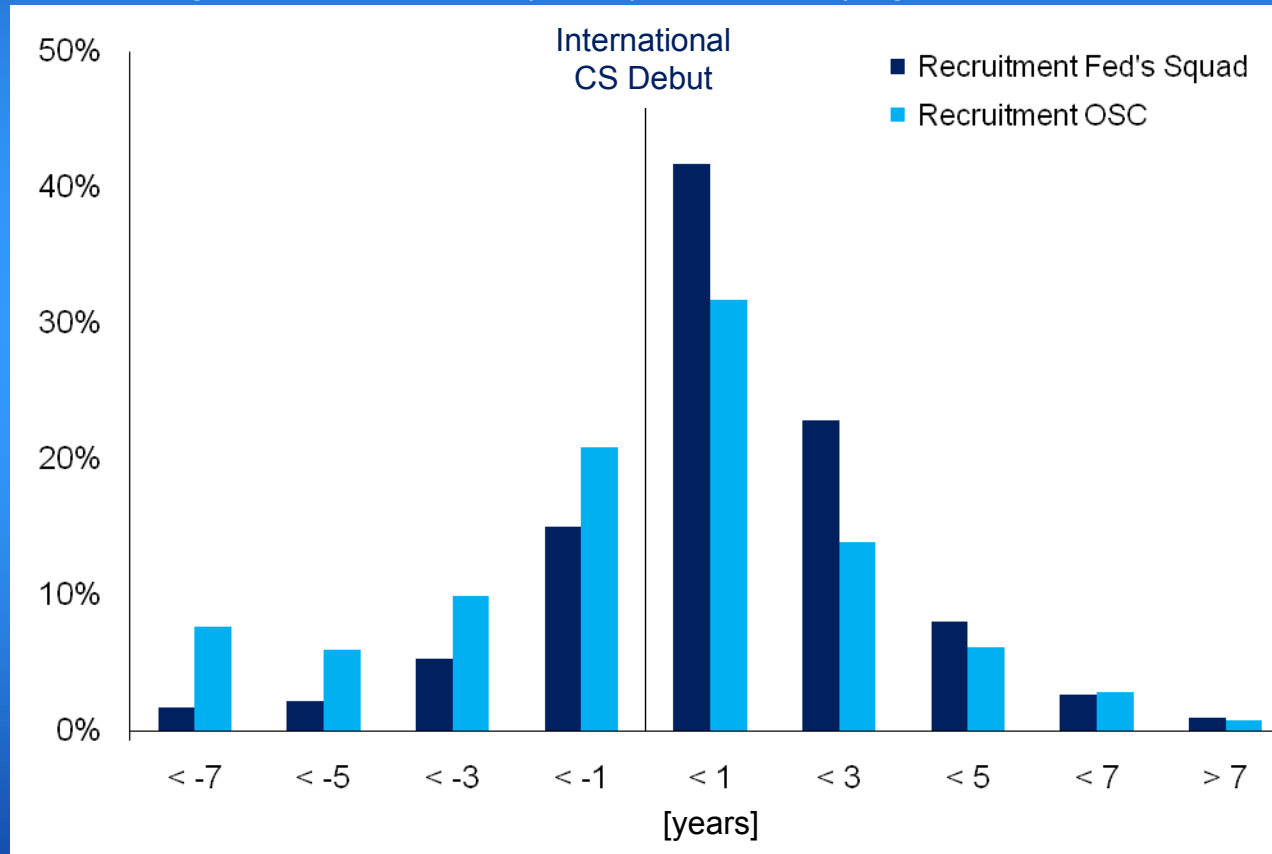
Coach Involvement and Contentment

	Quality	Availabil.	Change	Adjustm.
Orthopedics			**	
Internal Med.			**	
General Med		**	**	**
Physiotherapy	**	*	**	**
Nutr Counselling			**	**
Psychology			**	
Soc Env Managm		**	**	
Med Perf Diagn	**	**	**	**
Biomech Perf D	**	*	**	**
Exercise Science	**	**	**	**

Use of Services and Competitive Success

On potential selection effect

Age of international championship debut and of program recruitment



CS = Championship, OSC = Olympic Support Center

Use of Services and Competitive Success

Longitudinal Study 3 y, n=244; o = no systematic effect; – = negative effect of service use

Service Variables at t_1	Dependent Variables		
	Injury at t_2	Development of success t_1 - t_2	Success at t_2
Total			
Use of Services		o	o
Intensity of Service Use		o	o
Subjective Contentment		o	o
Service Institution (OSC vs. elsewhere)		o	o
Duration of Service Use		-	o
Injury at t_1			
Use of Services	o / -	o	o
Intensity of Service Use	o	o	o
Subjective Contentment	o / -	o	o
Service Institution (OSC vs. elsewhere)	o / -	o	o
No Injury at t_1			
Use of Services	o / -	o / -	o / -
Intensity of Service Use	o	o	o
Subjective Contentment	o	o	o
Service Institution (OSC vs. elsewhere)	o	o	o

Also: No systematic relation with intensity of service use or involvement of the coach

Evaluation of Elite Sport Schools

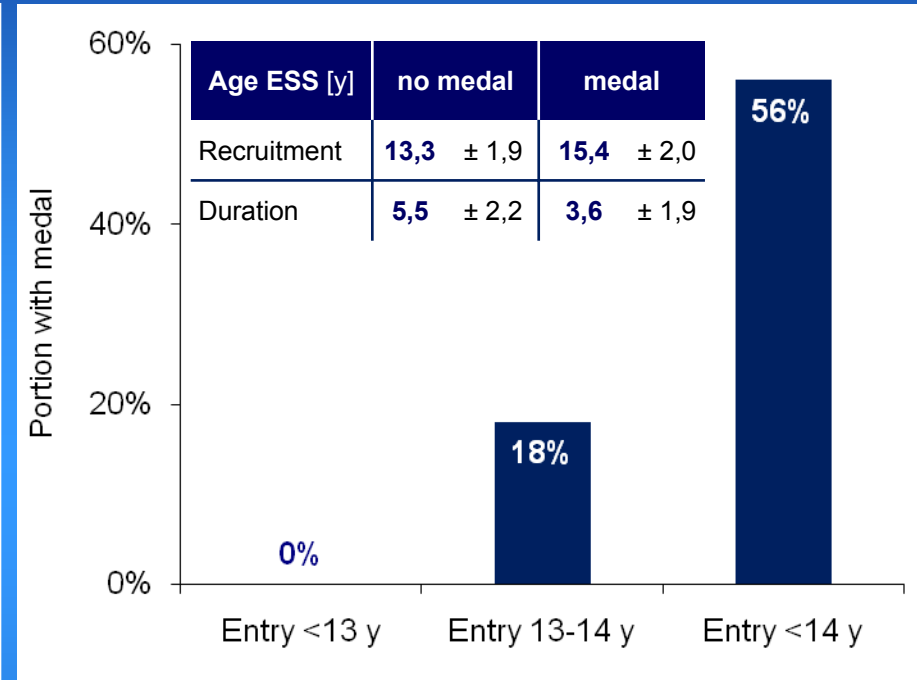
- Literature research (n=42)
 - Subjective Contentment
- Olympians (2004 & 2006; n=465 [ESS>1990])
 - Membership in Elite Sport School
 - Interference in coupling sport & school
 - School grade and post-school career
 - Olympic success

Elite Sport Schools

+ = positive; o = no systematic effect; – = negative effect

Variable	Results
Subjective Contentment	+
Training volume	+
Perceived Problems in Coordination	o / –
School Grade	o
Post-School Career	–
Youth Competitive Success	+ / o
Senior Olympic Success	o

Age structure



Summary

- Athletes well-informed about service
- Most athletes use (some) service(s)
 - mostly only sporadically
 - only partial involvement of coach
 - athletes' demands widely covered
- High subjective contentment
- Expected effects on performance empirically not confirmed
- Widely self-impulsed (vs. ordered) involvement

What makes the difference ?

(1) Training proces (2) Scientific research and service ...

- Better PLAN; stick to it
- Fulfilling set standards
- Performance factors
- GAP-approach: Differences between set standard and individual athlete data may be attributable to both, the standard norms and/or the athlete data
 - IT adjustments
- Trans-sectional and longitudinal interaction between training activities (30 to 100+) regarding (heterochronic) fatigue, recovery, adaptation; inter- and intraindividual differences
 - Training organisation = complex
 - Scientific research & service = important
 - Science vs. coach's "viewing window"
- Training intensity in OTHER sports (childhood, youth, senior) makes the difference in senior sport
 - = factors beyond conceived performance structure
- Performance factors of next generation uncertain
 - => contribution to success differences in elite sport fairly small
 - => practice focus of attention and effort on selected aspects

3 Conclusion, Discussion, Implications

