

Physical activity, health perception, barriers to exercise in adult non-athletes and athletes - Influence of sport during youth

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INTRODUCTION:

The vast majority of the German population has established sedentary lifestyles: Almost permanent sitting periods during work, traffic and leisure time [1-2]. Regular physical activity in youth is supposedly an important preventive factor against adopting adverse lifestyle habits later in life [3-5].

Aim: Identify differences between persons with physically active and inactive youth and to determine their present sport activity status, life style and health parameters as well as perceived barriers to exercise.

METHODS:

The nationwide "ACTivate Inactive Individuals" survey (www.dshs-koeln.de/acti-iv) served as data source for individual sport activities, sport history, motivation/barriers for sport, daily habits (nutrition, sitting times etc.) and anthropometric data (e.g. BMI). Two groups, "active youth" (+Bio; n=447, age 50±8 years, 60.2% women) vs. "inactive youth" (-Bio; n=448, age 50±8 years, 60.7% women) from the age range 35-65 yrs. were matched by age and gender. Groups were then split by actual exercise status into "non-athletes" (no/rarely sport) and "athletes" (≥ 1x training session a week); (Fig.1). Data are reported as means, standard deviations, and percentages. Statistics were performed using ANOVA, T-Test and Chi-Quadrat-Test.

Sport activity in youth Present sport activity active +Bio (n=447) Adolescents inactive -Bio (n=448) inactive -Bio (n=448) no/ rarely non-athletes (-) (n=310) non-athletes (-) (n=138)

Fig. 1: Group classification sport activity in youth and adulthood

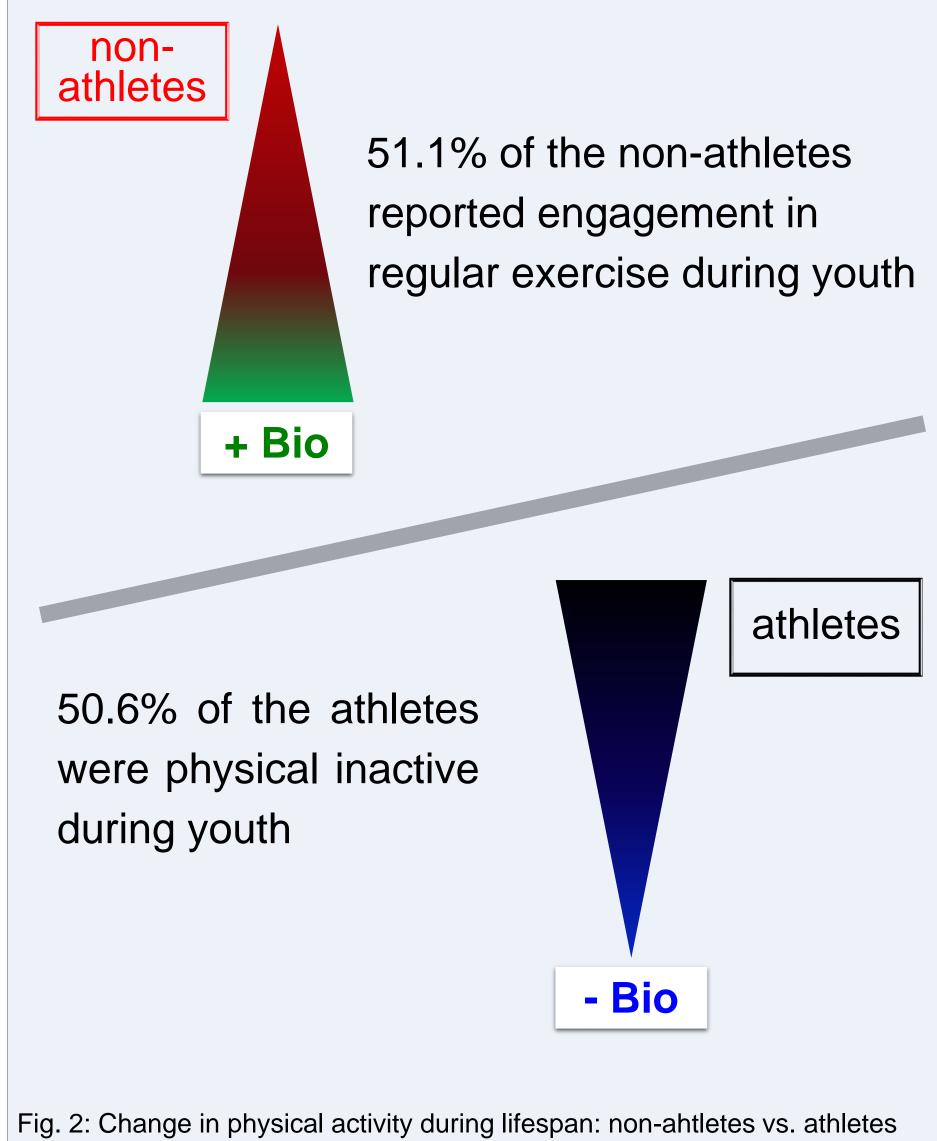
RESULTS

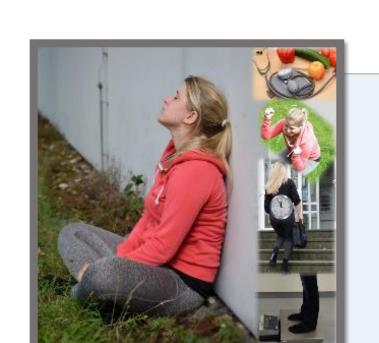


Physical activity
Sports and exercise
Physical activity in daily life

Training frequencies per week were virtually identical in the Bio groups:
+Bio 3.1±1.5 vs. -Bio 3.0±1.5

+BIO 3.1±1.5 VS. -BIO 3.0±1 (p=0.502, T=0.671)





Subjective health factors

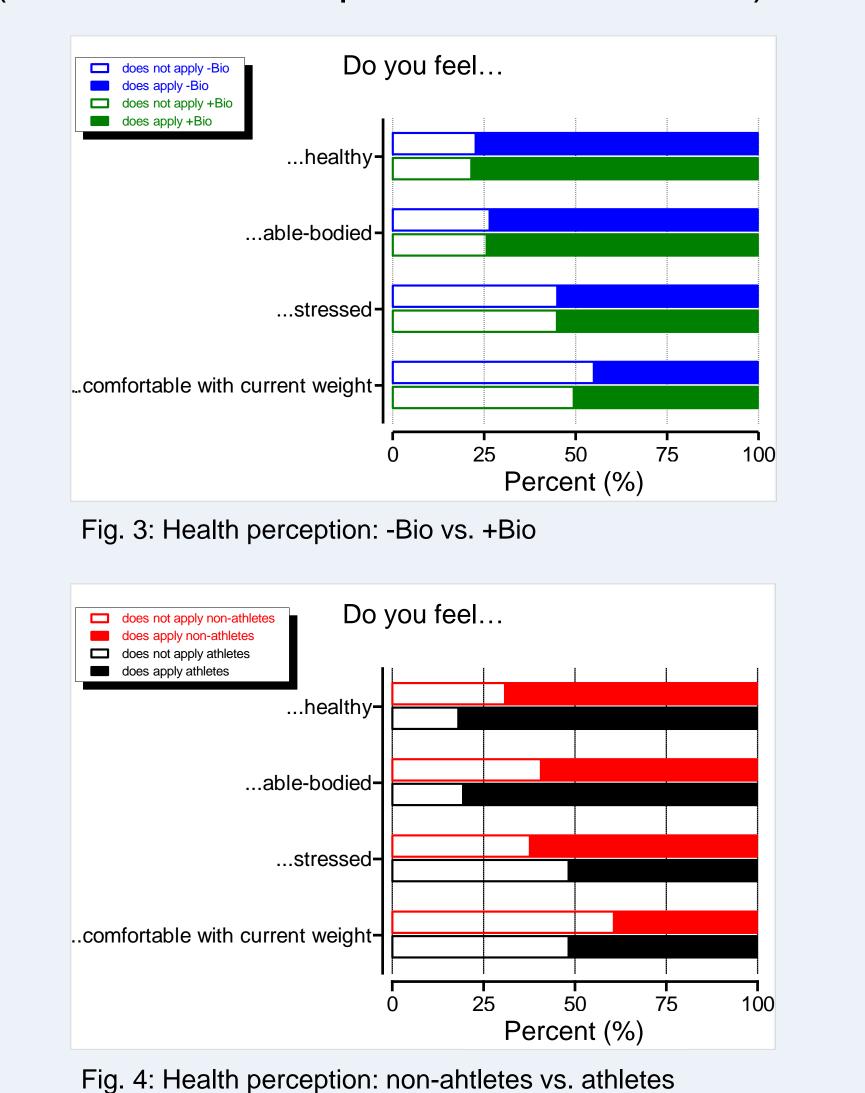
Health perception

Performance perception

Stress perception

Wellbeing with body weight

More non-athletes felt less healthy (18.3% vs 31.1%, p<0.001, $Chi^2=18.077$), less comfortable with body weight (48.5% vs 60.9%, p=0.001, $Chi^2=11.810$), less physical performance (19.6% vs 40.9%, p<0.001, $Chi^2=44.403$).



Barriers to excercise

Sports are no fun
Health reasons
Sport is to exhausting
Among friends sports play a minor role
Not enough time
Not suit the needs

Almost 60% of non-athletes quoted none or a maximum of one barrier for not exercising (p<0.001, Chi²=66.943).

"Lack of time" (35.5%) and "Sports are no fun" (18.9%) were the most frequent reasons in non-athletes.

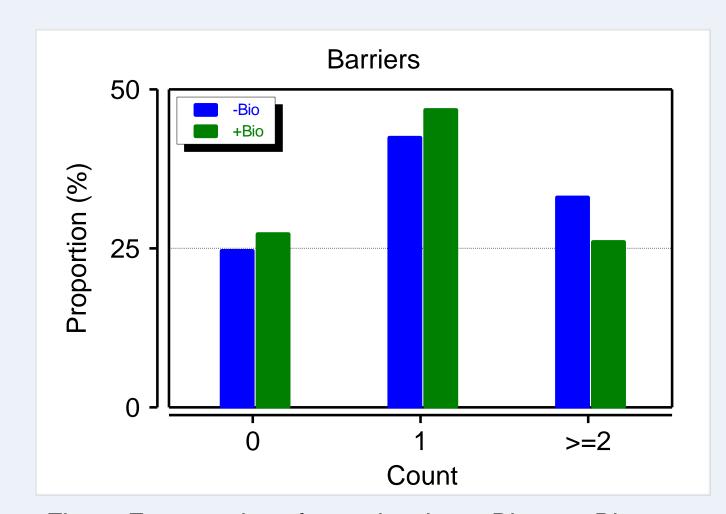


Fig. 5: Frequencies of sport barriers: -Bio vs. +Bio

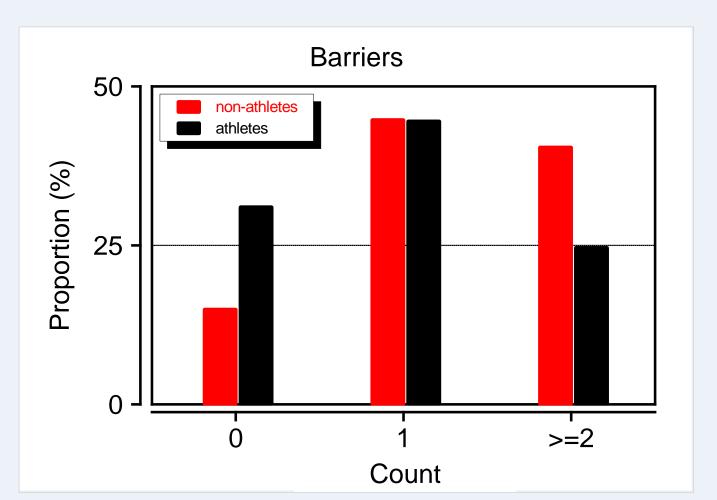


Fig. 6: Frequencies of sport barriers: non-ahtletes vs. athletes

Discussion

In contrast to common assumptions, this study shows only limited evidence for persisting influences of a positive sport biography during youth. Physical activity, weight status, perceived health, and fitness were similar in the +Bio and -Bio group. Moreover, a significant number of non-athletes reported regular training during youth. As expected, pronounced differences were confirmed between athletes and non-athletes. The present results underline the importance of (I) life-long exercise and (II) a culture of health and fitness by tailored health and fitness campaigns.

References

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