

## The sweet spot for sweet sport. Costs and benefits and non-linear associations between mental health and daily sports activity in a sample of young adults

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### Introduction

There is a broad agreement among professional health care providers and lay people that regular moderate physical activity is associated with both physical and mental health. By contrast, emerging data support the assumption that an excessive physical activity schedule could be associated with costs at behavioral and social level. In the present study, we investigated the so-called sweet spot. The sweet spot reflects the amount, duration, intensity and frequency of physical activity patterns associated with mental health and social benefits.

### Methods and Materials

#### Participants

- 197 participants;  $m_{\text{age}} = 28$  years; 64% females

#### Method

- Participants completed a series of self-rating questionnaires covering current subjective physical activity patterns, the daily time budget for sports/PA, their main reasons for being physically active, along with the activities they have to renounce to when being physically active. Participants were assigned to physical activity-categories, as shown in the Table below.

Tabelle 1: Soziodemographische Informationen

Kategorie	Teilnehmer (w/m)	Ø Alter (SD)
0	8 (4/4)	36.50 (16.26)
1	73 (53/20)	29.55 (8.56)
2	89 (54/35)	26.57 (6.60)
3	20 (11/9)	25.30 (7.12)
4+	7 (4/3)	24.86 (8.23)
Gesamt	197 (126/71)	27.89 (8.23)

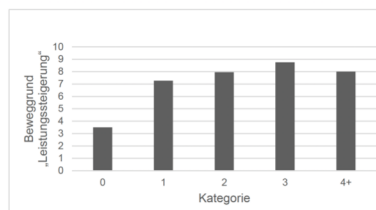


Abbildung 2: Beweggrund „Leistungsteigerung“ (Werte zwischen 0 und 10 möglich; je höher der Wert, desto eher ein Beweggrund)

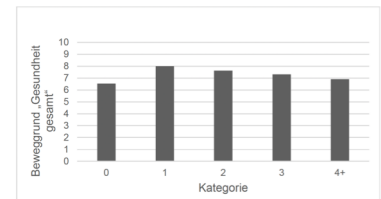


Abbildung 3: Beweggrund „Gesundheit gesamt“ zusammengesetzt aus „körperliche Gesundheit pflegen“, „mentale Gesundheit pflegen“ und „fit für alltägliche Aktivitäten“ (Werte von 0 bis 10 möglich; je höher der Wert, desto eher ein Beweggrund)

### Results

Figure 1 (Abbildung 2) shows that those exercising more than 4h the day are less interested in increasing their performance.

Figure 2 (Abbildung 3) shows that those exercising continuously more than 2h/d are less interested in staying physically healthy.

Figure 3 (Abbildung 4) shows that those exercising 4h/ day are doing so to the disadvantage of their family.

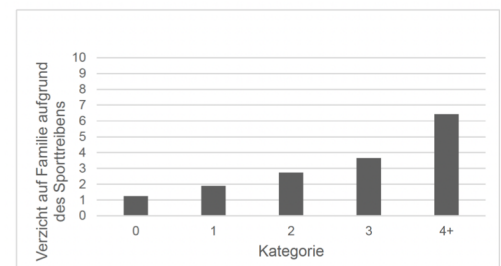


Abbildung 4: Verzicht auf Familie aufgrund des Sporttreibens (Werte zwischen 0-10 möglich; je höher der Wert, desto grösser der Verzicht)

### Discussion

“Every value has its price!” Data suggest that those exercising 4 and more h/d do this to the disadvantage of their family and to meeting and talking to other people. It is conceivable that the lack of social support and social contact might increase the risk of mental health problems among heavy exercisers. This holds even more true, as their main driver is not be stay physically healthy and to improve their physical performance.

### Contact

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