

Pokot grip strength

Supplementary Table 21. Generalized Additive Models of Pokot grip strength, subset excluding 2 male participants with highest values

*Testing for age * sex interaction*

Formula: grip strength ~ sex + s(age) + s(age, by = sex_orderedFactor)

```
Parametric coefficients:
      Estimate Std. Error t value Pr(>|t|)
(Intercept)  22.452      1.400  16.037 < 2e-16 ***
sexm         13.107      2.047   6.403 1.46e-07 ***
---
Approximate significance of smooth terms:
      edf Ref.df    F  p-value
s(age)      1.001  1.001 0.298 0.588887
s(age):sexOfm 3.214  3.951 6.031 0.000636 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

R-sq.(adj) = 0.606  Deviance explained = 65.3%
-REML = 144.89  Scale est. = 45.011  n = 45
```

Testing for significance of sex and age

Formula: grip strength ~ sex + s(age, by = sex)

```
Parametric coefficients:
      Estimate Std. Error t value Pr(>|t|)
(Intercept)  22.452      1.400  16.037 < 2e-16 ***
sexm         13.107      2.047   6.403 1.46e-07 ***
---
Approximate significance of smooth terms:
      edf Ref.df    F  p-value
s(age):sexf 1.000  1.001 0.298 0.588791
s(age):sexm 3.214  3.951 5.959 0.000693 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

R-sq.(adj) = 0.606  Deviance explained = 65.3%
-REML = 144.89  Scale est. = 45.011  n = 45
```

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Supplementary Figure 1. Pokot maximum grip strength, two Pokot male participants with highest grip strength values (open green circles) removed. Solid line represents age spline produced from model with all participants. Dashed line represents age spline produced from model with reduced sample.

