Self-reported VAS Substituting RPE Scale to Evaluate Exercise Load in an Incremental Running Test

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18 healthy trained male long-distance runners
- Age: 21.5 ± 2.0 yr
- Height: 178.6 ± 5.0 cm
- Weight: 70.3 ± 6.0 kg
- Training Volume: 398.8 ± 102.4 km/month

- Pearson's correlation (n=107): stronger relationship of BLa-VAS (r=0.90, p<0.001) than BLa-RPE (r=0.87, p<0.001), although both were strong.
- Optimal results of regression: RPE increased more as a linear while VAS changed in parallel with the BLa profile as a typical curve relationship.
- The average subjective feeling of exhaustion reflected on the RPE was 13, which corresponded to 87 AU on the VAS after this test.

- VAS, with its unique form, had a stronger correlation with BLa profile, closer matching the load accumulation process than RPE did during the incremental running test.
- VAS might be more suitable for repeatedly measuring acute training load in a subjective way.
- Further integration of the VAS substituting typical RPE scale in training monitoring and quantification can be considered.

Visual analogue scale (VAS)
- A reliable and valid tool for the subjective measurement of fatigue, with 2 anchors at the ends of a 100 mm straight line.
- Subjects are blinded for the scale's values (side A) and have to slide the vernier, after which it is reset.
- This might bring a better correlation for accumulative load (referred to as BLa concentration profile)

Encouragement + Time feedback per min

y = -0.002x^2 + 0.122x + 0.45x + 9.04
R^2 = 0.77

y = 0.0006x^2 + 0.036x^2 - 0.29x + 1.87
R^2 = 0.70

y = 0.38x + 6.83
R^2 = 0.84