



Fitness test of sport riders in dressage and show jumping



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INTRODUCTION

In equestrian sport there has been a great focus on the horses training, but the riders training is often forgotten. There are several reasons for dismounted training; it may include an improved sensitivity, fitness and stability in the riding. There are few studies on riders physical training but no previous studies have compared dressage and show jumping in riders dismounted physical performance.

MATERIAL AND METHODS

The participants were young rider and high school students within the elite program. In November 4, 2009, the students carried out a fitness test (Cooper's test and a movement analysis). Each student got an individual designed training program for improve to the following-up tests. In February 16, 2010, the student perform the Cooper's test again. All riders could not participate at all test due to health problems such as a cold, an injured limb or had resigned from the educational program.

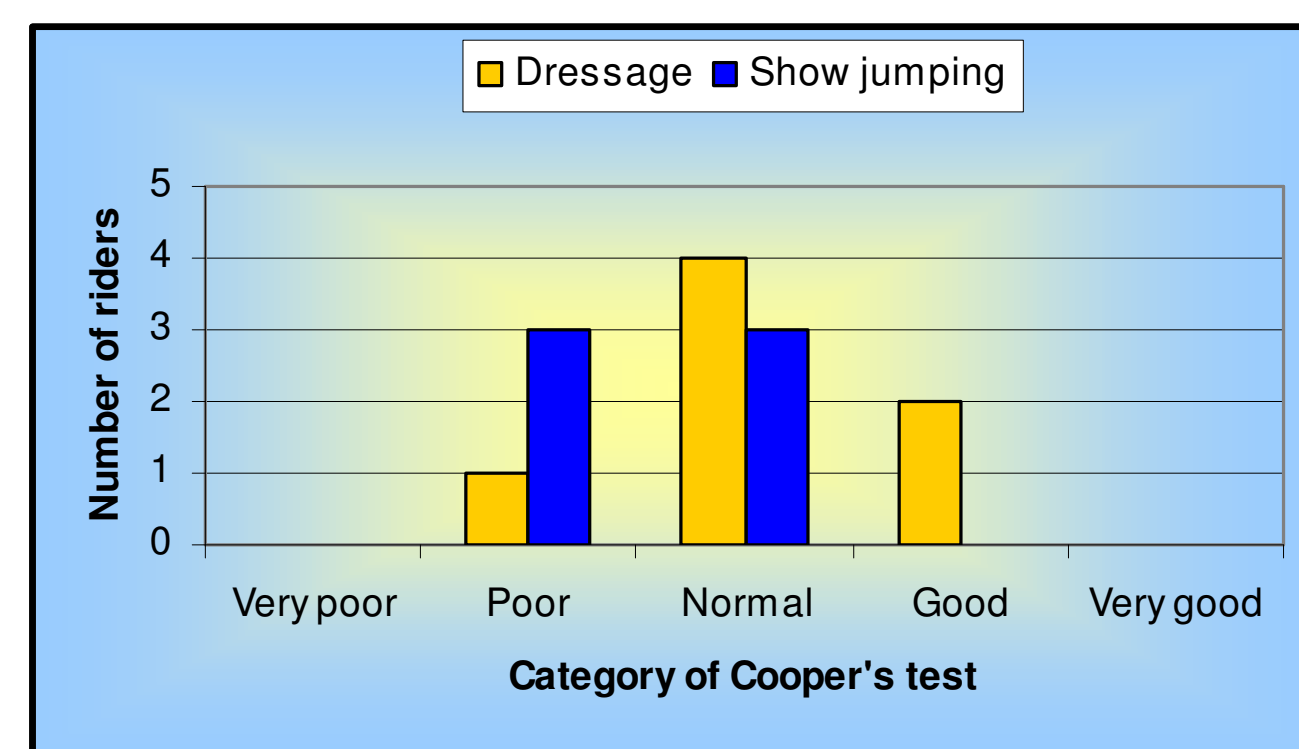
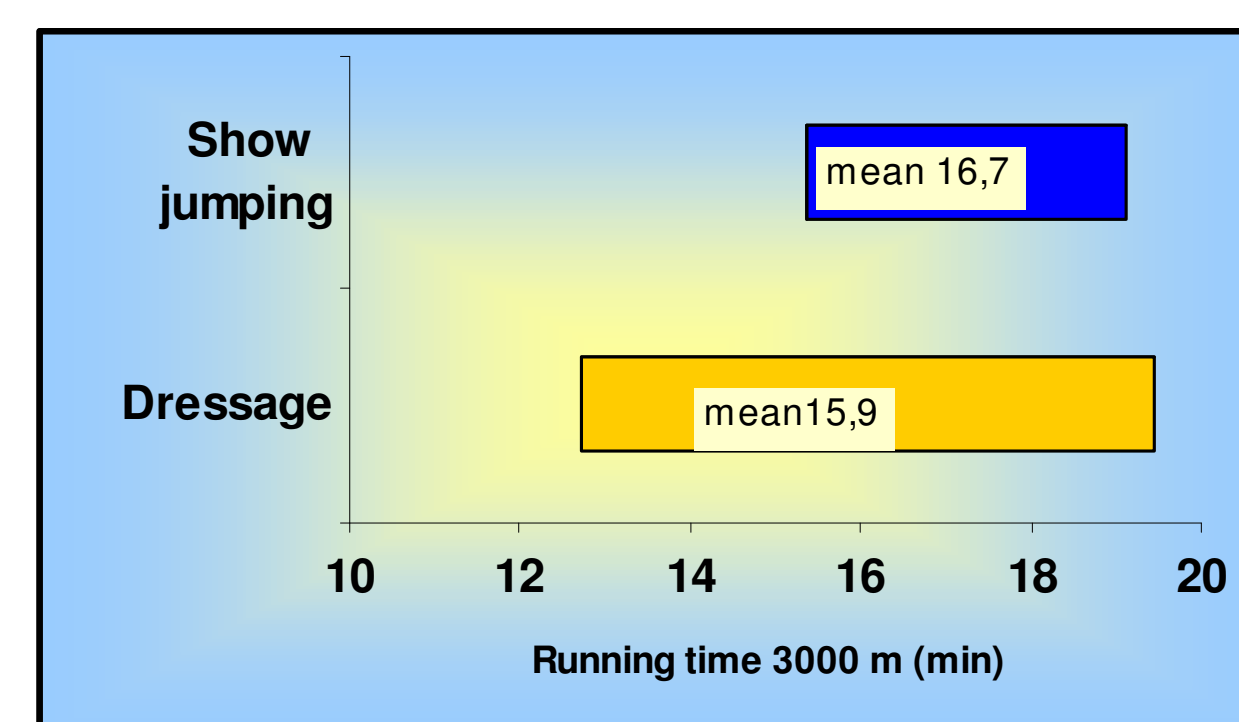
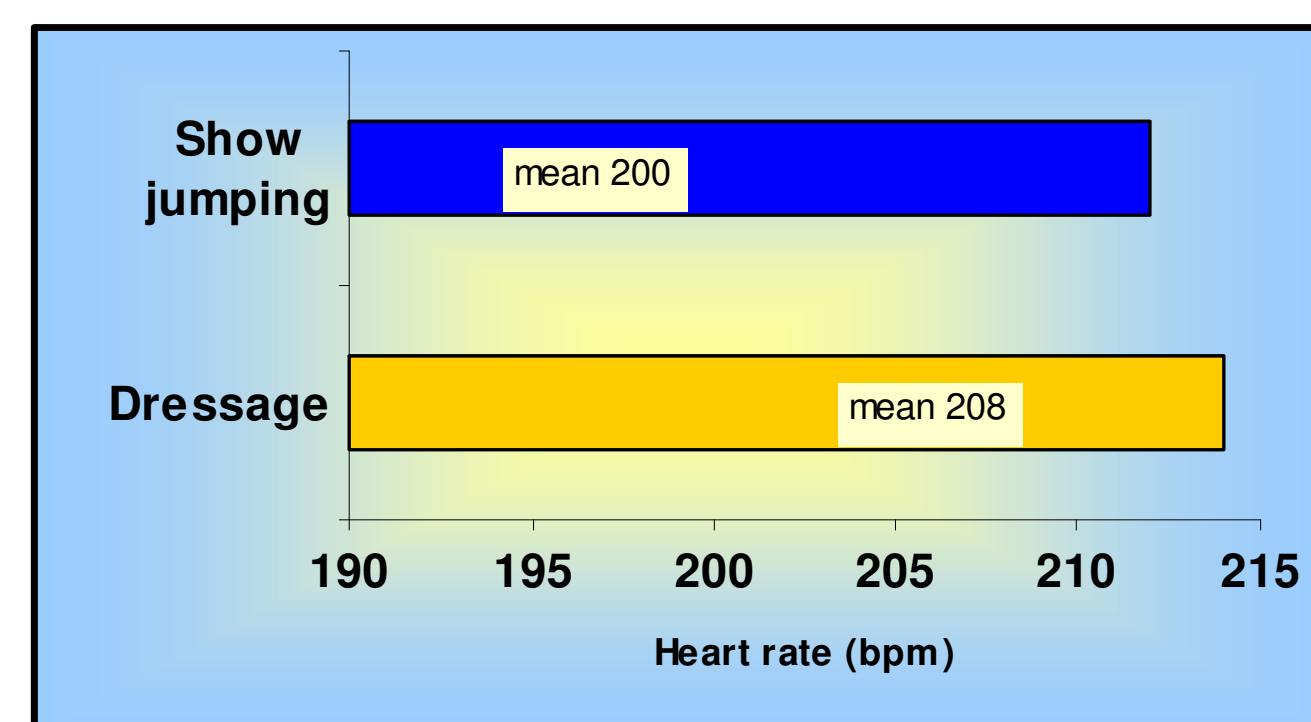


Statistical analyses to compare the two groups, dressage and show jumping:

- t-test for fitness parameters
- Chi-2 test for movement analysis
- Paired t-test to compare fitness results between Nov and Feb.
- Significance level= $p < 0.05$

RESULTS

November – compared fitness



Movement analysis showed no significant differences between the group.

Both knee joint and torso had many remarks on stability (9 out of 13). There were also remarks on flexibility for hamstring, hip-bender and thorax area (5 out of 13).

February

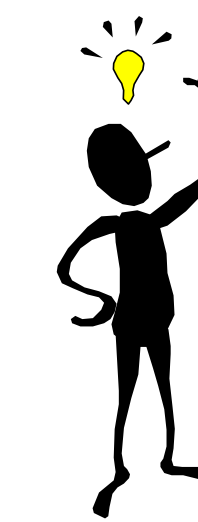
Seven rider performed Cooper's test in both Nov and Feb.

No significantly changes in fitness over time, even though there was a tendency ($p=0.08$) to a decline in Feb (normal-poor) compared to Nov (normal). This can be explained by a harsh winter that complicated outdoor training, but also the fact that the students tried to run in a more tactic way the second time, made a misjudgement and had strengths left after the finishing line.



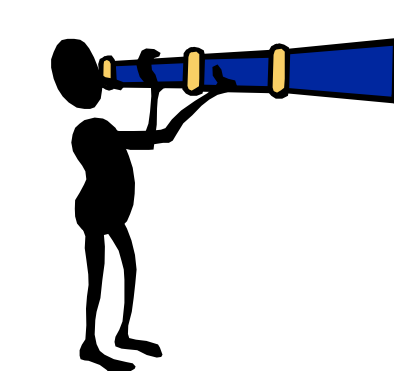
THE AIM

- ★ to study the fitness of sport riders in dressage compared to show jumping.
- ★ to follow-up the effects of dismounted physical training as a complement to riding.



CONCLUSIONS

- We could not detect fitness differences between riders in dressage and riders in showjumping.
- The riders had a normal to poor fitness level and could benefit from additional dismounted physical training, even though they are difficult to motivate.



FUTURE STUDIES

This study has not evaluated the physical fitness in relation to performance in competition or actual demands of physical fitness while riding dressage or show jumping. Therefore are further studies in this field of research are needed.

ACKNOWLEDGEMENTS

We would like to thank our personal fitness trainer during the project, Pierre Styfberg. He arranged the test at Bosön – the Swedish National Sport Complex.

And of course, our students who participate in the tests!