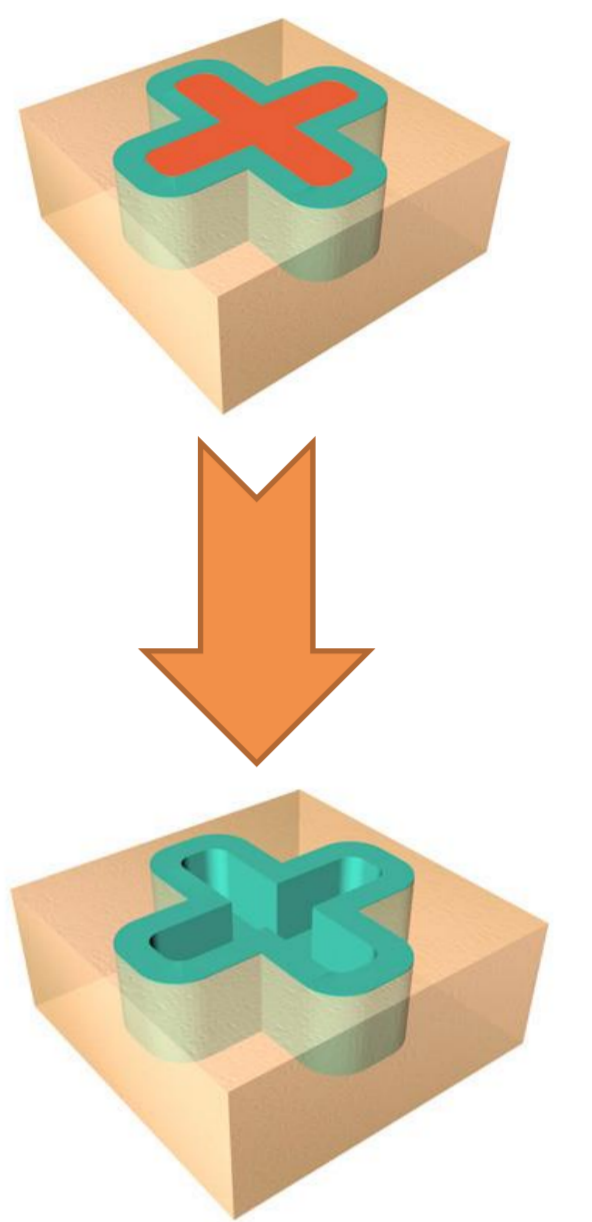


### Introduction

The aim of the study was to investigate whether giving students control over the moment taking a manual dexterity test, affected their results.

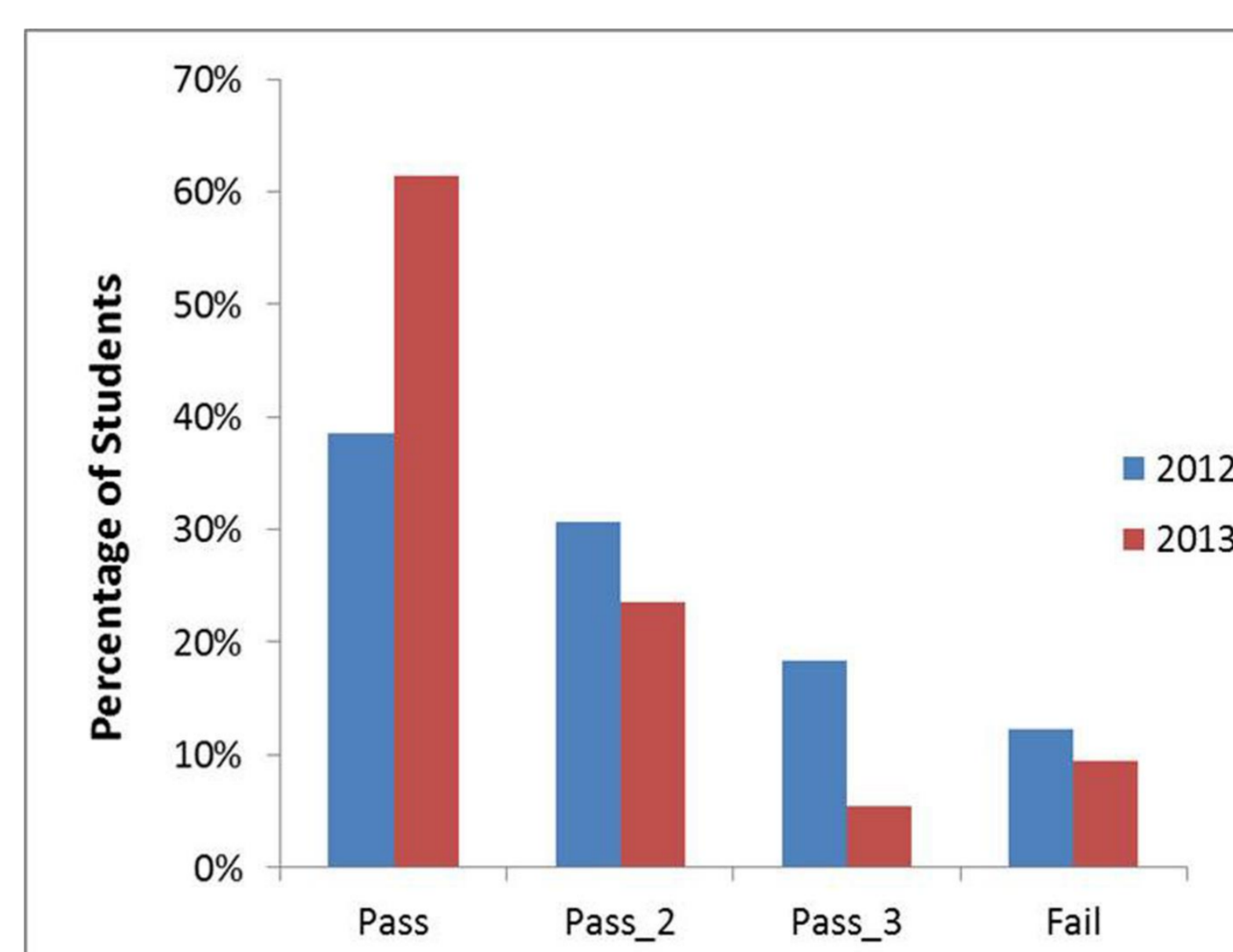
### Materials and Methods

This retrospective study compared two groups of 120 first year students (female 70%, male 30%). Both followed the manual dexterity training using the Simodont dental trainer. After a short introduction (2 hours) students followed the training in their own pace. The training was followed by a test. To pass the test, three out of five exercises had to be successful within a time limit of 45 minutes. The test was successful when 90% of the red was removed and the beige was not touched. The course 2011- 2012 had a scheduled test (fixed group); students in the course 2012-2013 could apply for the test as soon they felt prepared for it (free group).

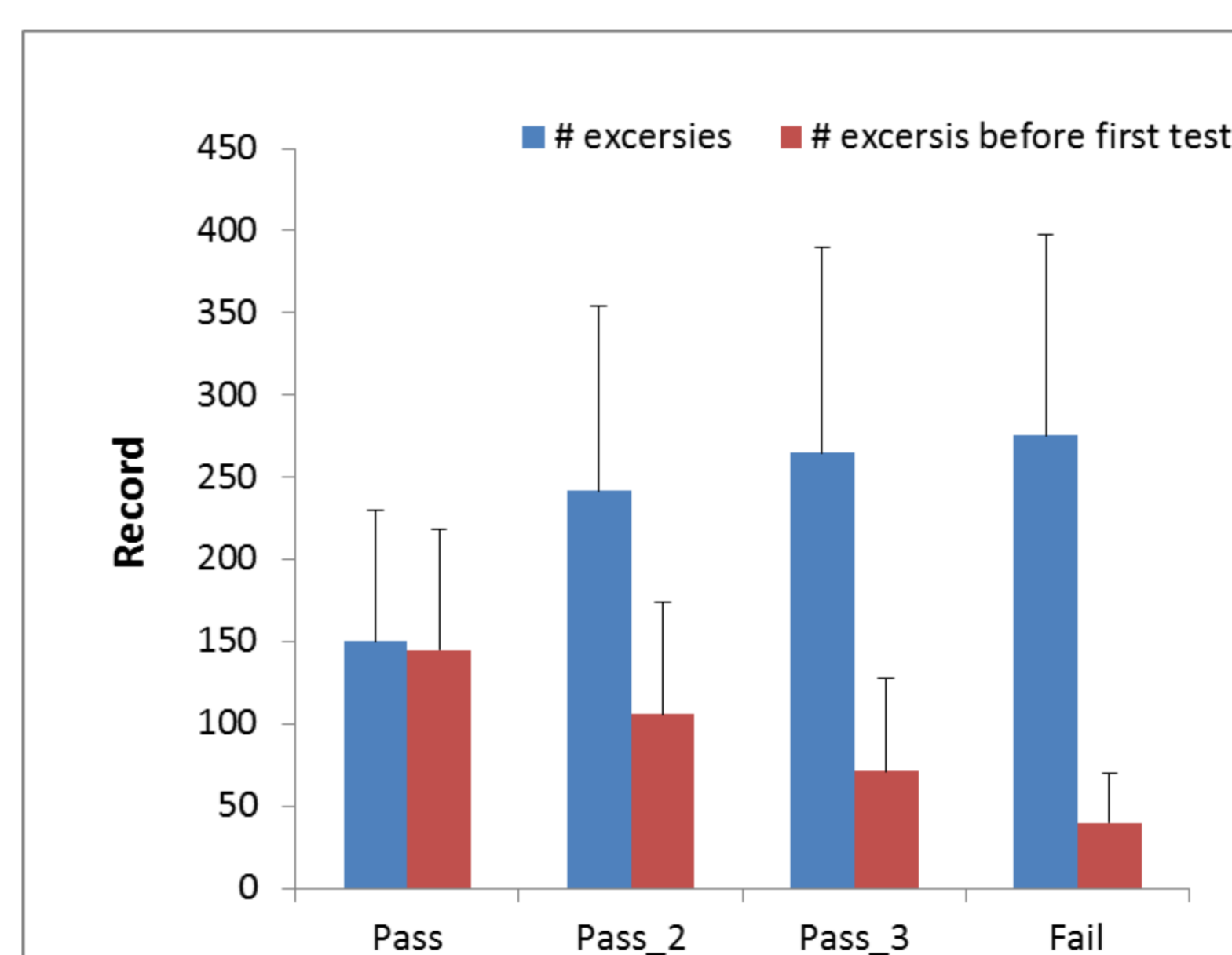


### Results

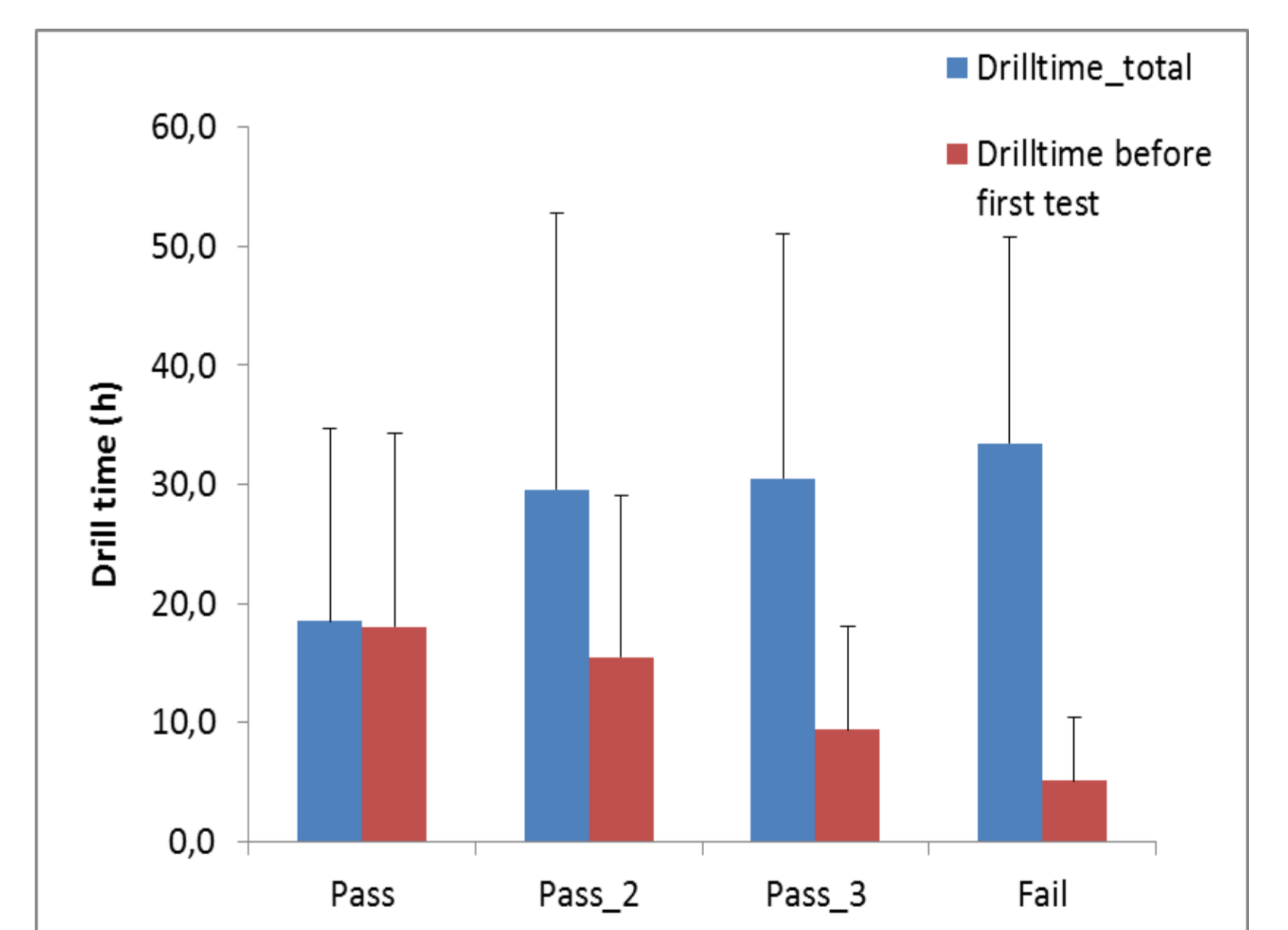
The results showed that 61% of the students in 2013 passed the test at the first time, against 39% of the students in 2012 (free versus fixed test moment). The result of the free group remained better also at the second test moment (83% versus 70%). After three tests the results of both groups were equal (90 % versus 88%).



The results of the fixed groups showed that students that passed the first test had practiced more (145 exercises versus 50) and longer (18 hours versus 5) than students who failed the first test moment.



The group that failed after 3 tests performed 84 % more exercises than the group that passed the first test (270 exercises versus 145).



The results for the fixed groups showed that the average drill time (min) per exercise is equal for all four groups (7:30 minutes).

### Conclusion

Results suggest that giving students control over their own learning and testing environment positively affected their results. When working within a fixed schedule, starting early is a good policy, starting early making many drill hours is an even better policy.

