

Onderwijs & Innovatie

Summer school participation in relation to academic performance, motivation and academic self-esteem

European First Year Experience

Cork, Ireland, 18th June 2019

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*“Students **felt more confident** after participating in the summercourse, they started the study program with the feeling: ‘I can do this’.*

*“Students also participate to **boost their confidence.**”*

*“The program was **effective in the social and academic integration of students.** Students were very enthusiastic.”*

*“Students often think “I can’t do calculus” or they say “My mother can’t do calculus so neither can I”. They have **no confidence which will create a selffulfilling prophecy.** With a different mindset they have more chance of succeeding.”*

Math summer school

Characteristics

- First year students Aeronautical Engineering
- Five days, end of summer holiday
- Voluntary participation, costs € 150,-
- Math assignments

Research Question

- What are the effects of participation in the summer school program on math skills?
- Do participants experience more motivation and academic self-esteem after participation?
- Do dropout rates differ between participating and non-participating students?
- Do participants differ from non-participating students in motivation or academic self-esteem?

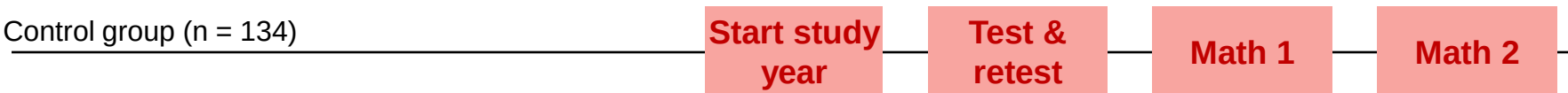
Method

- Test- retest
 - Math test & questionnaire, motivation, academic self-esteem, assessment of own skills, evaluation
- Participants and Control group
- 2 years: 2016 & 2017

Participants (n = 55)



Control group (n = 134)



Participating vs. non-participating students

Differences

- Previous education
- Assessment of own math skills
- Academic self-esteem

No differences

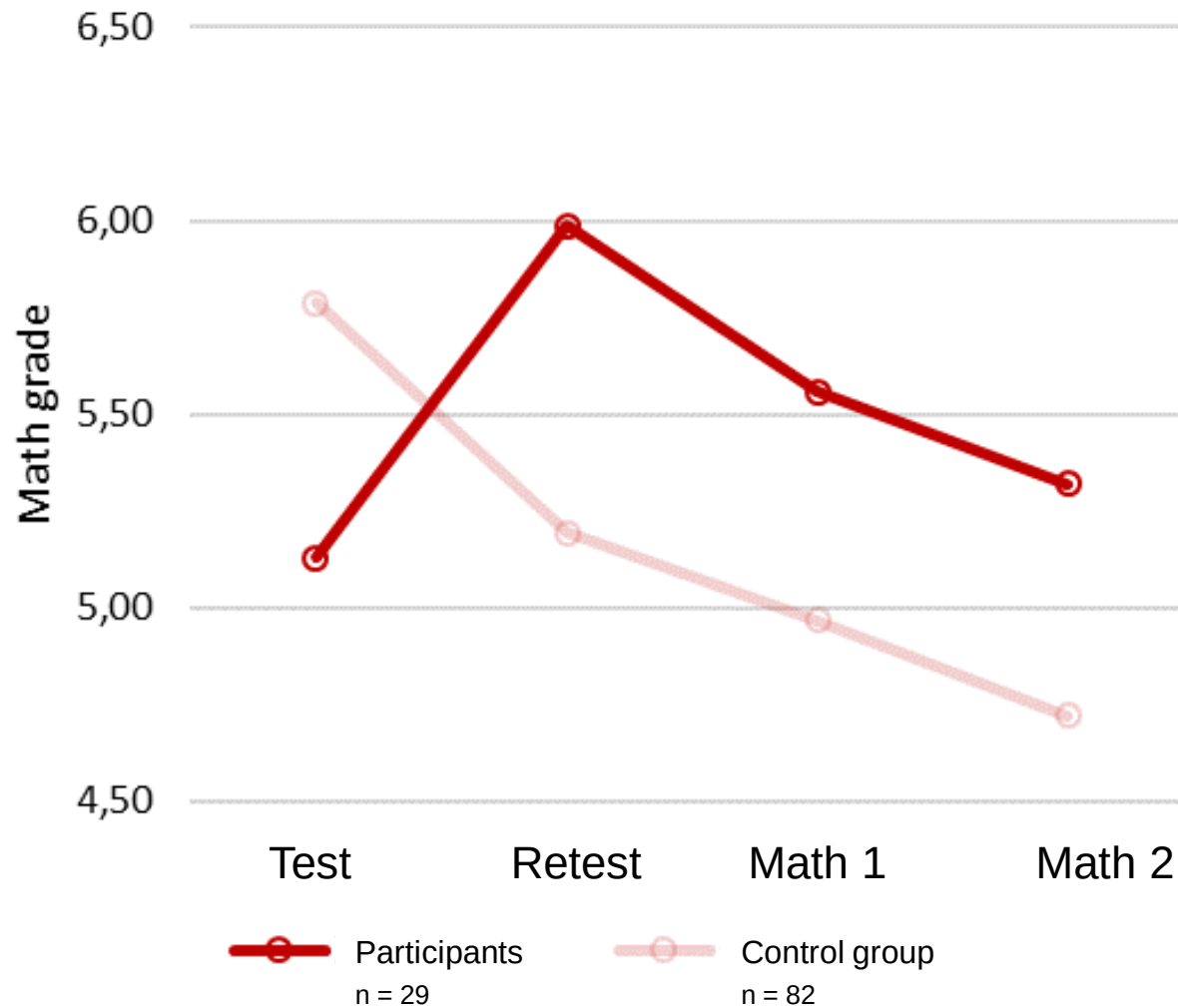
- Gender
- Assessment of own language-, planning and study skills
- Motivation

Pre- vs. post participation

Increased after participation:

- Assessment of own math, planning and study skills
- Autonomous motivation
- Generally no differences in controlled motivation and academic self-esteem

Math grades



Dropout

No significant differences

		Participants	Control group
Dropout	Yes	52%	43%
	No	48%	57%

Participants (n = 54)
Control group (n = 133)

Conclusion

After participation, participants:

- Experience better math, planning and study skills
- Perform better on a math test
- Have more autonomous motivation
 - Not more controlled motivation or academic self-esteem

In comparison to control group

- Less academic self-esteem
- No differences in motivation
- No differences in dropout

Questions?

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Research group for Study Success

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