

Evolution of medical students' learning approaches during their preclinical and clinical trainings: a cohort study

Anne Baroffio, Margaret W. Gerbase, Milena Abbiati, Marie-Paule Gustin

FACULTÉ DE MÉDECINE



UNIVERSITÉ DE GENÈVE



Université Claude Bernard



Background

Learning approaches are central to students' learning outcomes. Influencing students' approaches towards deep learning is a complex process and little is known about how factors relate one to another. Existent evidence suggests that students adopt deep (DA) or surface (SA) approaches depending inter alia on the educational context.

Aim of the study

To investigate the evolution of students' learning approaches throughout undergraduate medical studies, based on their individual baseline scores.

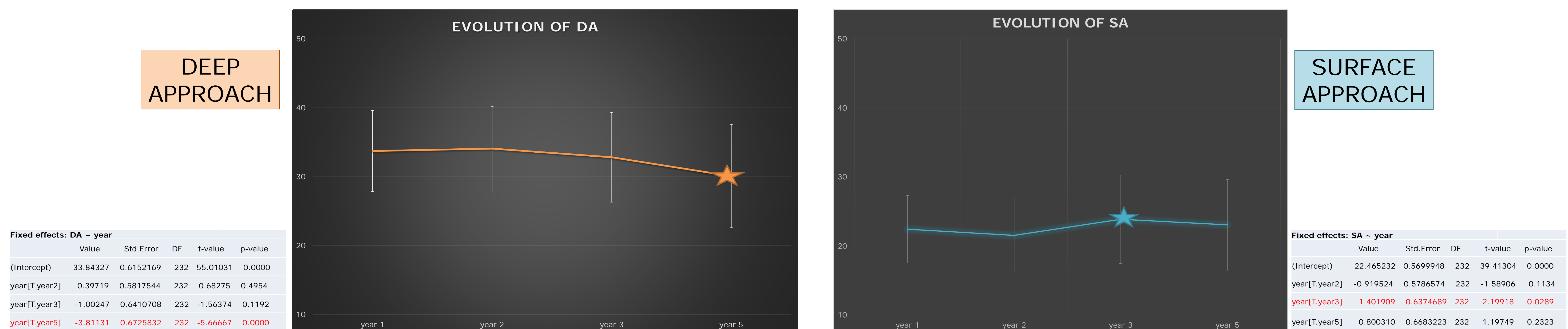
Summary of work

DA and SA of 90 medical students was measured using the Revised-Revised-Study-Process-Questionnaire (RSPQ-2F) at 4 occasions from their 1st to their 5th study year (DA range: 10-50). Evolution of DA and SA was investigated using mixed ANOVA. The effect of baseline DA on DA and SA evolution at subsequent years was assessed using mixed ANCOVA.

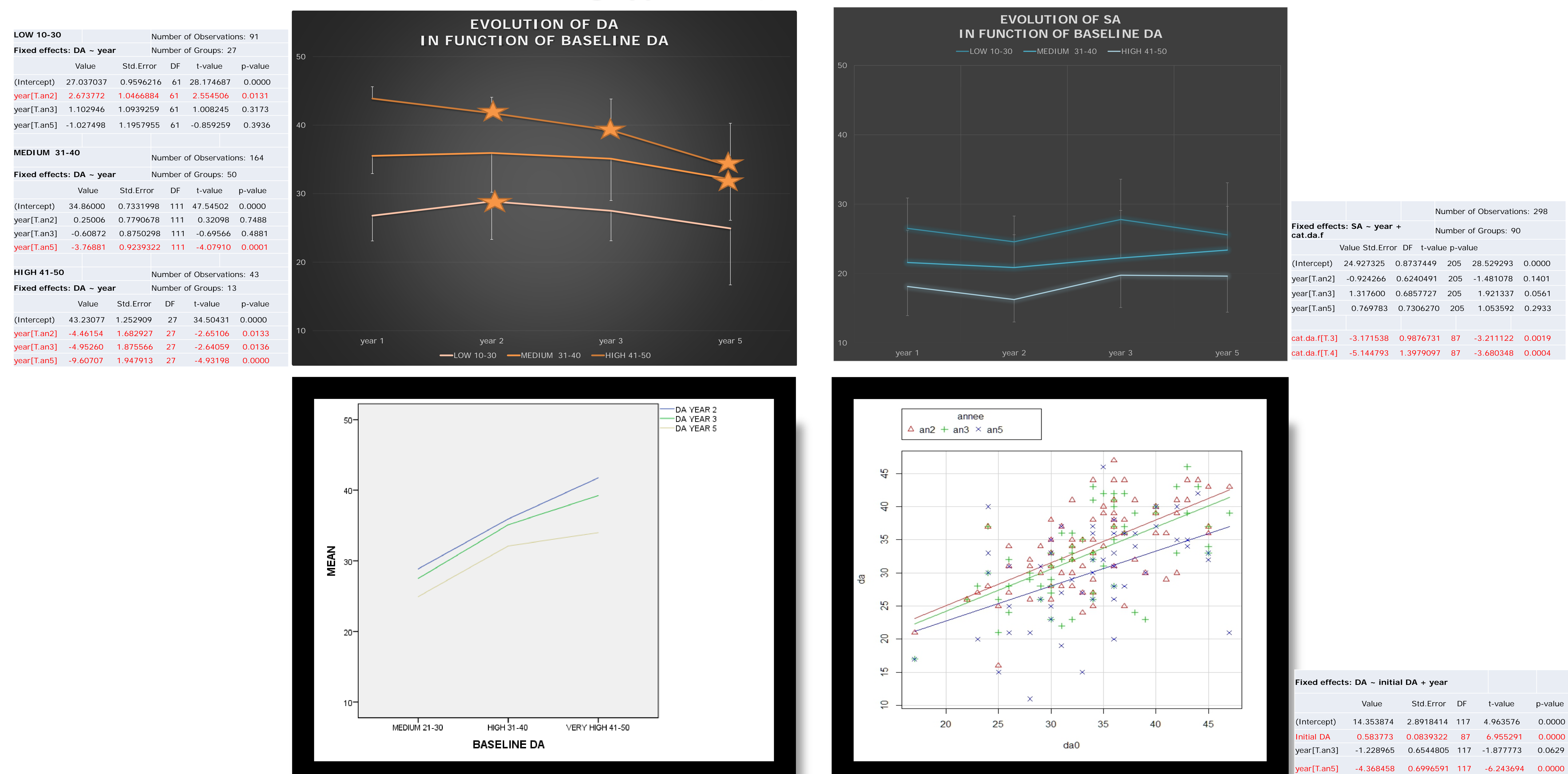
Summary of results

Overall, students' use of DA was stable during the preclinical years, but decreased during the clinical training. DA at year 5 was lower of 3.1 points than DA at year 3 regardless of baseline DA. Baseline DA increased DA for all subsequent study years by a factor of 0.6. SA was globally stable during the medical training, with however a slight increase between the second and third years of training.

1. Evolution of students' learning approaches throughout undergraduate medical studies



2. Evolution of students' learning approaches, based on their individual baseline DA scores.



Discussion and conclusion

Findings from this cohort show that students' baseline level of DA positively influenced their subsequent use of DA, but also that the clinical educational context led students to use less DA regardless of this baseline level. This suggests that the clinical educational context might influence students' learning approaches, independently of their baseline level. This is paradoxical with regard to the deep approaches needed to clinical reasoning. We hypothesize that this could be due to the perception by students of their educational environment.