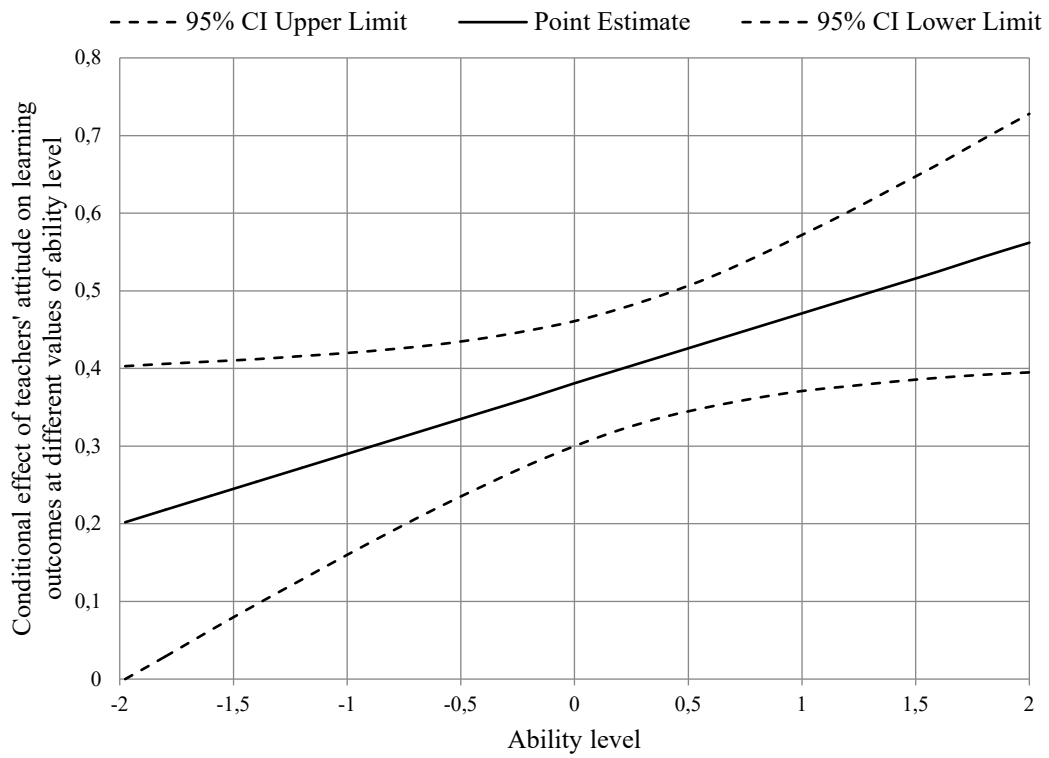


S1. Mixed linear model (MLM) regression with random effects for the intercept: Pupils' self-perceived learning outcomes from participation in national tests

Variables	b	SE	p
V2 Teachers' attitudes	0.372	(0.047)	< 0.001
V3 Gender, (1 = boys, 0 = girls)	0.214	(0.071)	0.003
V4 Ability level	0.129	(0.057)	0.023
V5 Teachers' attitude × ability level	0.088	(0.035)	0.011
V6 Teachers' attitude × gender	-0.061	(0.061)	0.321
V7 Ability level × gender	-0.189	(0.077)	0.014
V8 Class (1 = 9 th grade, 0 = 8 th grade)	0.048	(0.079)	0.552
Model summary			
Constant	1.797	(0.061)	< 0.001
Covariance parameters (within / between)	0.827 / 0.009		
Model fit (AIC / BIC)	2012.32 / 2021.53		
Pseudo R ² (marginal / conditional)	0.183 / 0.192		

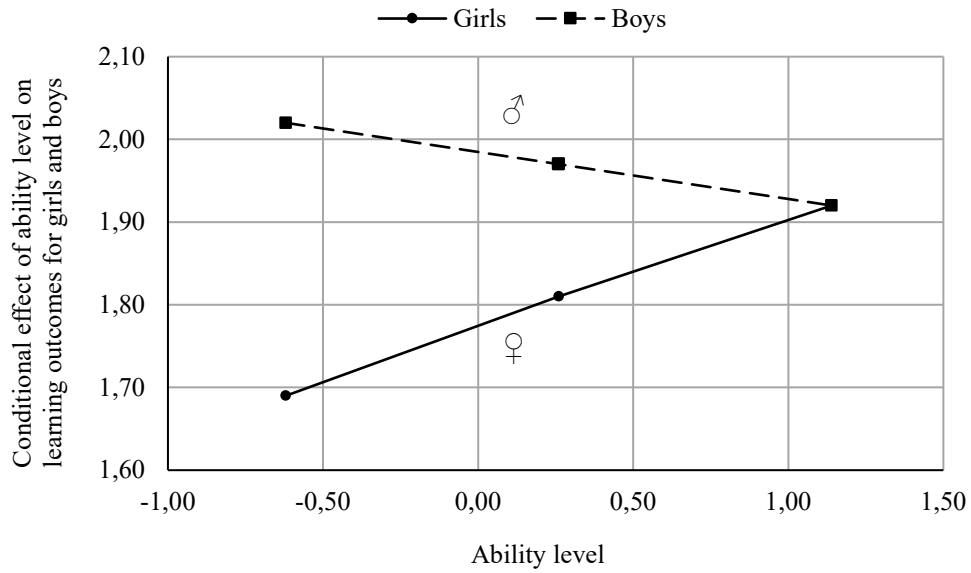
Notes: N=746. Model estimated with restricted maximum likelihood (REML) method and with pupils clustered within schools and class-levels. Inclusion of additional random effects does not improve model fit or changes the results. For example, inclusion of an additional random effect for teachers' attitude returns an AIC of 2011.54 and BIC of 2020.74, and b = 0.376, SE = 0.051, p < 0.001). Additionally inclusion of schools as a fixed effect adds 19 parameters to the model and returns a worse model fit (AIC = 2015.96 and BIC = 2025.21) while the F-test for the overall effect for schools is statistically insignificant, F(39)=1.097, p = 0.391.

S2. Plot of the conditional effect of teachers' attitude on learning outcomes under different values for ability level



Note: The value “0” for ability level represents that the pupils indicate their perception of their level to be “on the average” compared to other pupils.

S3. Plot of conditional effects of ability level on learning outcomes for boys and girls



Note: Coefficients (b) and p-values for girls= 0.130, p = .018 and boys = -0.058, p = .375. Dots represent learning outcomes at, respectively, one standard deviation below and above the mean sample value for ability level (-0.62, 0.26, and 1.16 respectively).