

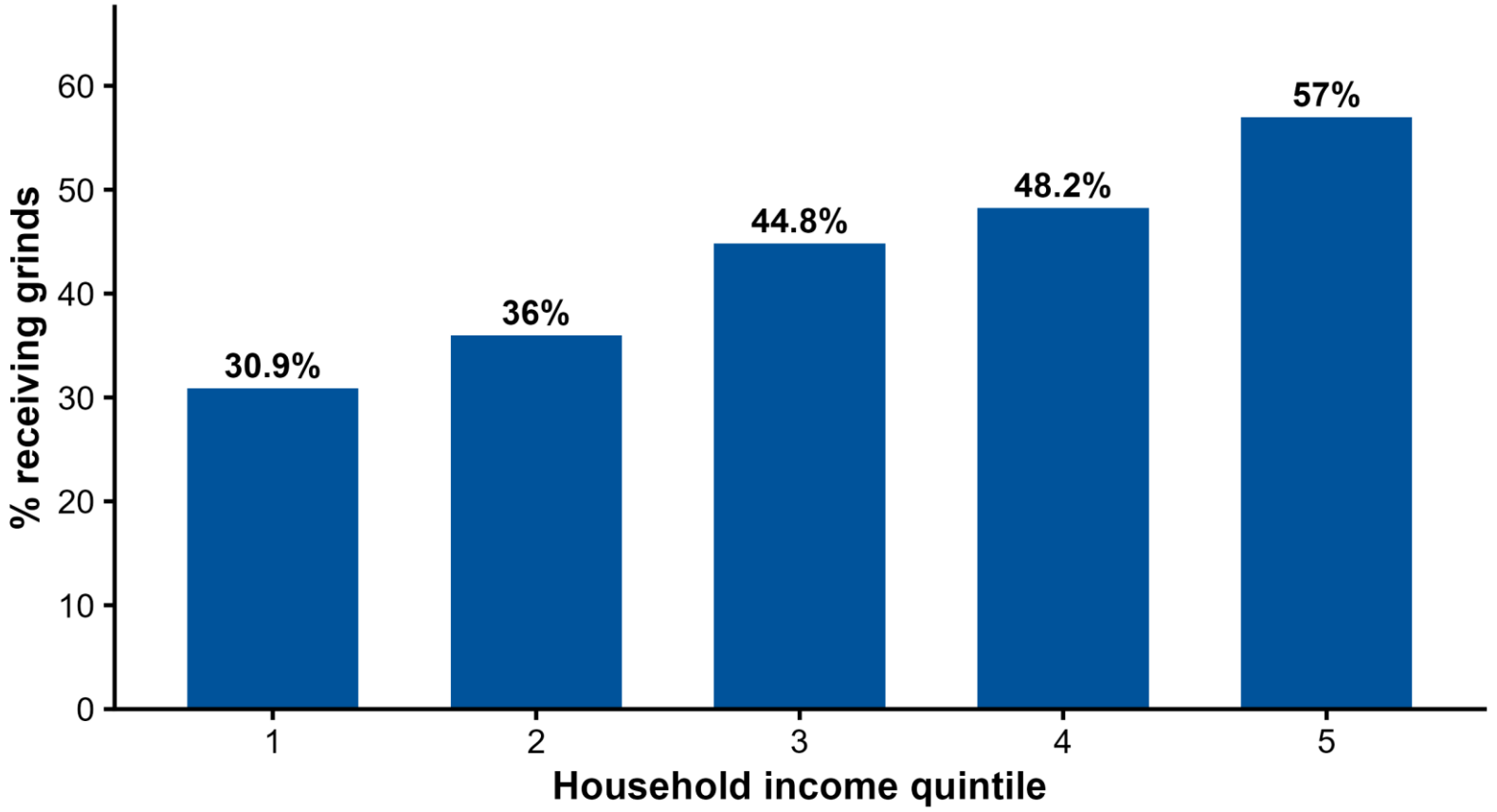
Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
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Privat Tuition and Leaving Certificate Attainment: Evidence from Growing Up in Ireland

Growing up in Ireland (GUI) Child Cohort 98' Waves 1-4

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Grinds concentrated among higher-income households



Grinds participation nearly doubles between the lowest and highest household income quintiles (31% vs. 57%).

Research Questions and Contribution

1. **Does private tuition improve Leaving Cert results?**
   - Mixed evidence from Ireland (Cullinan et al., 2021; Smyth 2009) as well as internationally (REFS)

2. **How does this differ by prior academic ability, household income or school type?**
   - Some evidence that more effective for certain types of students (Lee 2013; Cullinan et al., 2021)

Contribution

- Use latest and more comprehensive GUI data than earlier Irish studies

  - Smyth (2009): data from School Leavers Survey (2004) and Schools Database (1994), Junior Certificate used as Prior Ability Measure.

  - Cullinan (2021), using data from School Leavers Survey (2007), prior ability not included/available.

Data & Methodology

Data & Methodology

Data

Dataset
Growing Up in Ireland (GUI), Child Cohort '98 Waves 1-4.

Dependent Variable
Leaving Certificate Proxy (LCP), constructed from English, Irish and Maths results.

Final Sample
2,851 observations (Appendix 1,2).

Methodology

Estimation
Ordinary Least Squares (OLS) Regression.

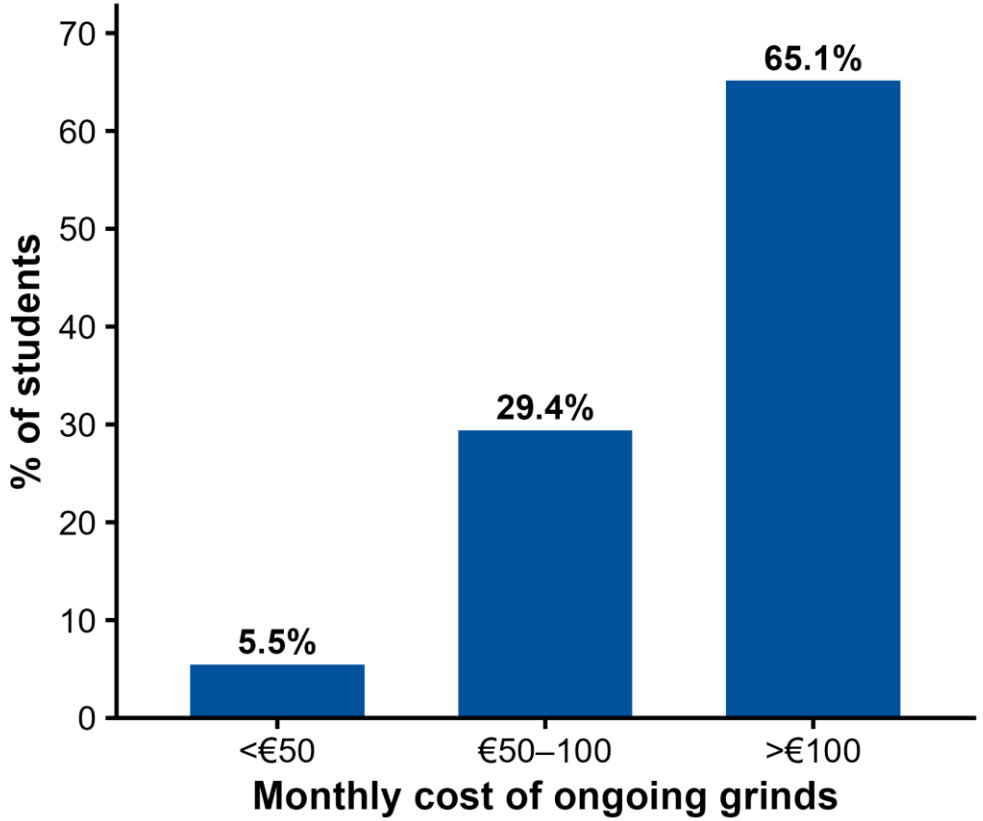
Explanatory Variables
Ongoing and block grinds, household income, school type, gender and prior academic ability.

Prior Academic Ability
Composite index based on Drumcondra assessments in English and Maths at ages 9 and 13.

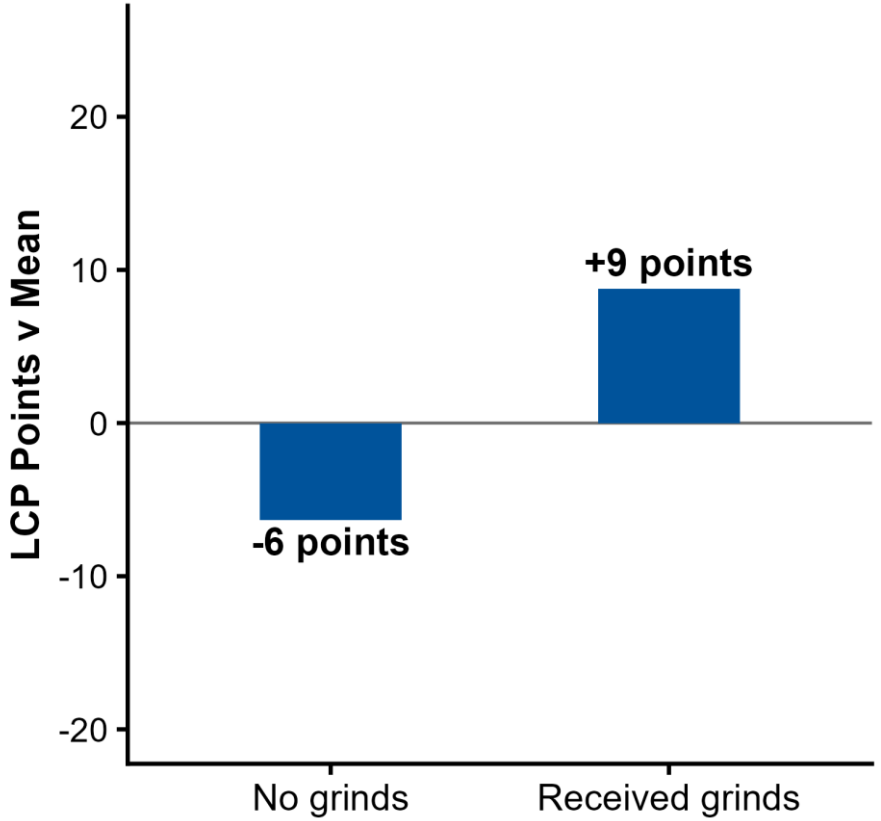
Source: Growing Up in Ireland, Child Cohort '98. LCP and prior ability measures adapted from O'Connell & Marks (2024).

Results

Costs and Attainment

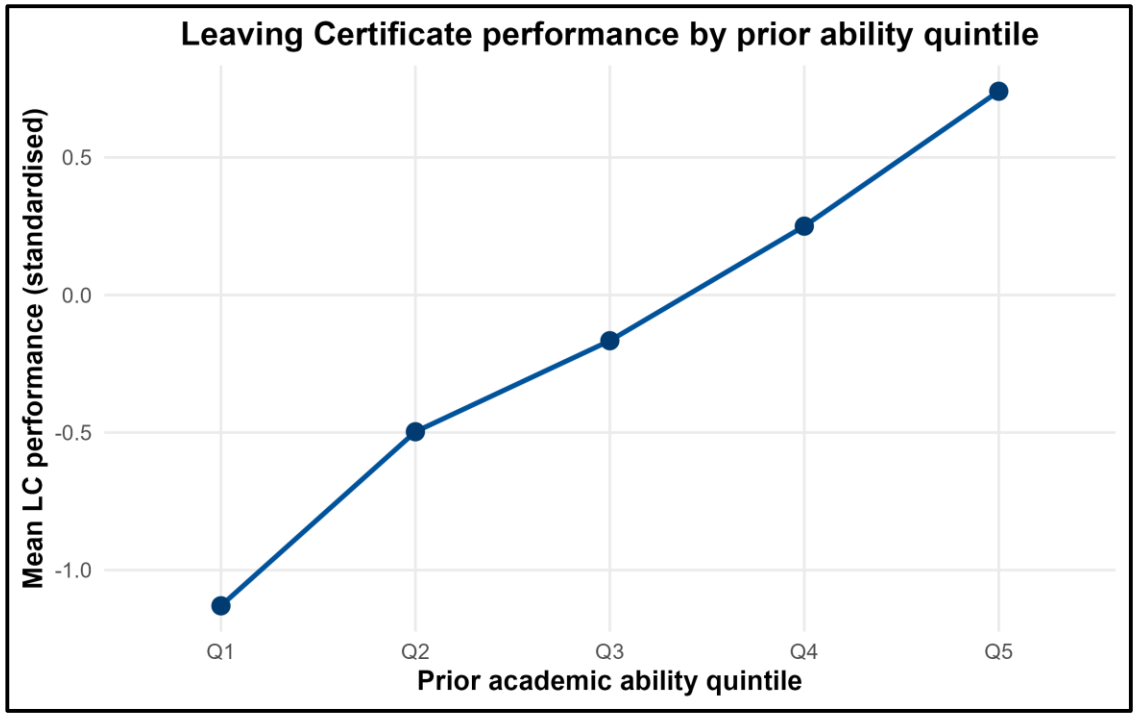


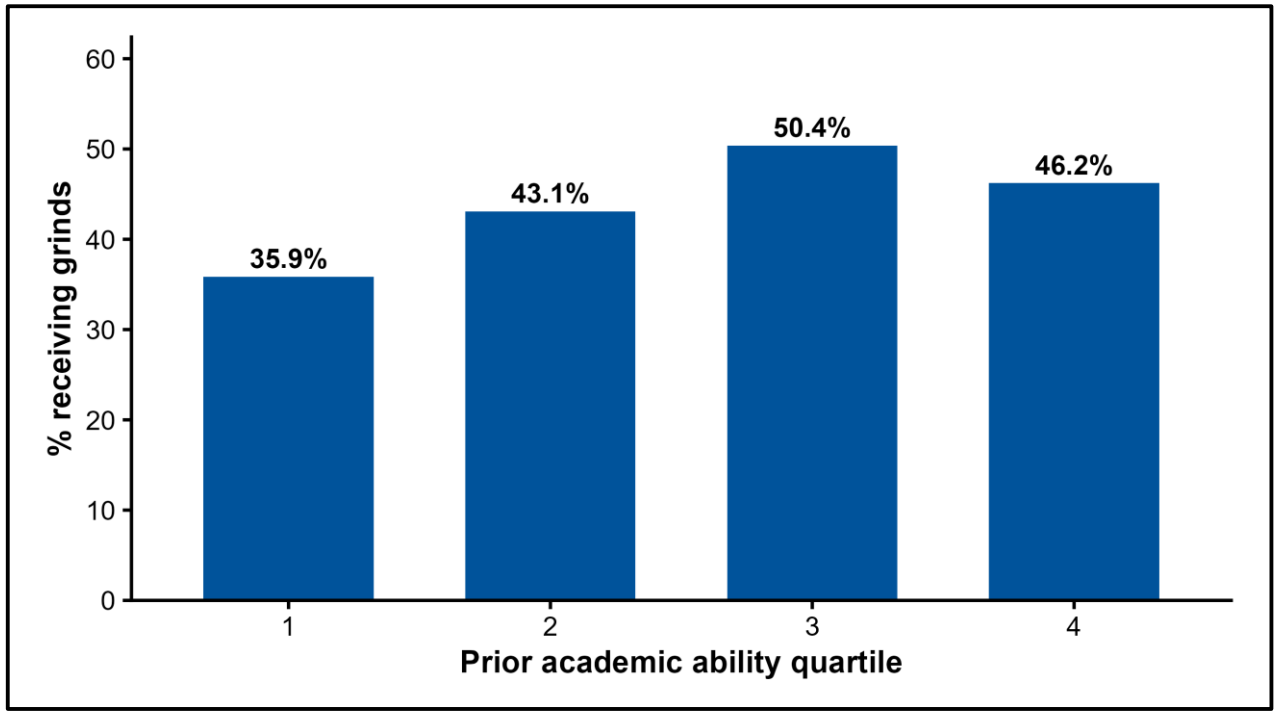
Nearly two thirds of students receiving grinds spend more than €100 per month.



Students who received grinds had higher LC attainment.

Prior ability is strongly associated with Leaving Certificate performance





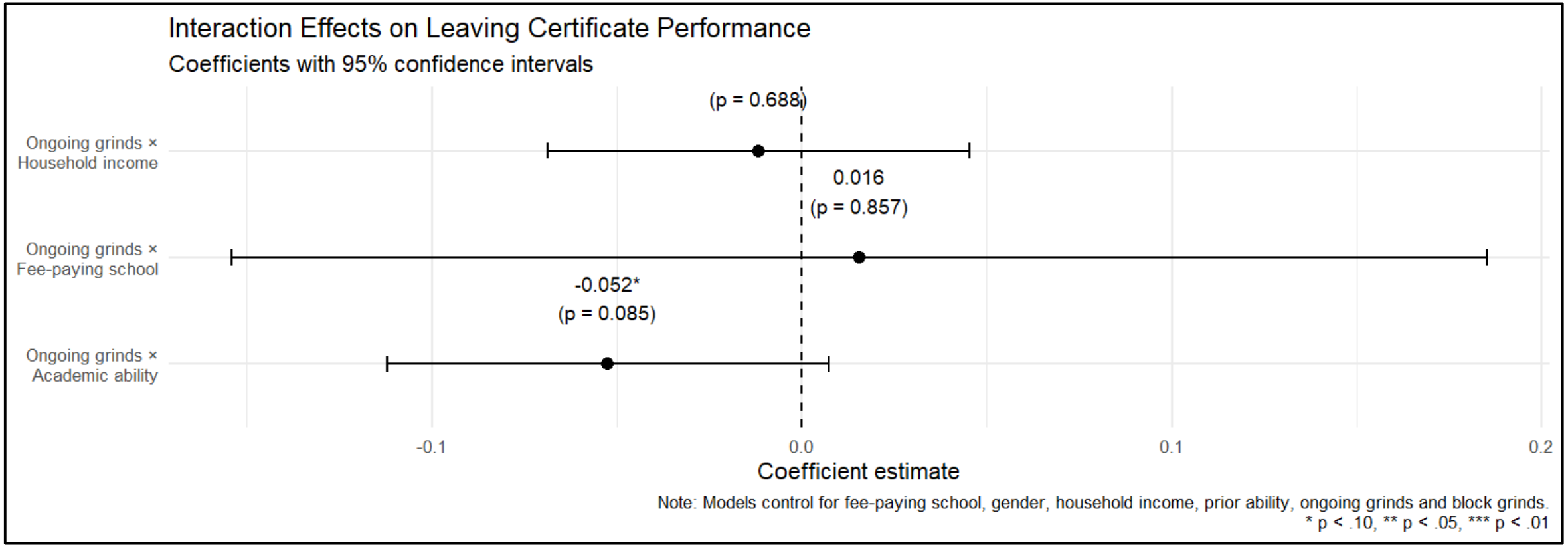
Main Regression Results

Grinds and Leaving Certificate Performance

	Dependent variable:			
	Leaving Certificate Proxy (standardised)			
	Grinds only	+ Gender/school	+ Income	+ Prior ability
	(1)	(2)	(3)	(4)
Ongoing grinds	0.224***	0.208***	0.153***	0.171***
	(0.038)	(0.038)	(0.037)	(0.029)
Block grinds	0.155***	0.144***	0.083*	-0.030
	(0.049)	(0.048)	(0.046)	(0.037)
Female		0.113***	0.116***	0.252***
		(0.037)	(0.035)	(0.028)
Fee-paying school		0.477***	0.221***	0.066
		(0.049)	(0.051)	(0.043)
Household income			0.274***	0.142***
			(0.019)	(0.015)
Prior academic ability				0.627***
				(0.015)
Observations	2,851	2,851	2,851	2,851
R^2	0.019	0.045	0.110	0.433
Note:	HC1 robust standard errors in parentheses. Same sample throughout.			
	* p < 0.10; ** p < 0.05; *** p < 0.01.			

- Receiving ongoing grinds is associated with a 0.17 SD (≈11 point) higher Leaving Certificate Proxy score after controls.
  - *Note: LCP made up of three LC subjects so an extra 11 points out of 325 as opposed to 625.*
- No statistically significant association is observed for block grinds.

Regression with interaction effects



- Weak evidence that grinds are more effective for students with lower prior ability.
- No significant evidence from household income and school type.
  - *Also holds when interacting household income quintiles as opposed to as a continuous variable.*

Conclusions

- Ongoing grinds were positively associated ($p<0.01$) with Leaving Certificate attainment (LCP).
- Block grinds showed no significant association.
- No significant evidence that the association between grinds and attainment differed by household income or school type, with only weak evidence of larger benefits among lower ability students.
- Access to grinds remained strongly socially stratified.
- ***Caveat:*** *Unobserved differences in motivation, parental support and study effort may influence both grinds participation and attainment, so the estimates cannot be interpreted conclusively as causal effects.*

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Appendix

Sample Size

GUI Wave 1 – 8,568 respondents
GUI Wave 2 – 7,525 respondents
GUI Wave 3 – 6,216 respondents
GUI Wave 4 – 5,190 respondents

- Regressions involving answers from all 4 waves

Respondents with Valid LCP – 4046 , contingent on three core subjects 1144 missing at least one subject score

Valid School Type – 3010, 1036 missing school type
Valid LAA – 2852, 158 missing at least one Drumcondra score
Final Model – 2851, 1 valid for all of the above but missing grinds score

Sample Size

Outcome	Sample	Ongoing grinds, β (HC1 SE)
English + Maths + Irish	2,851	0.171*** (0.029)
English + Maths, original sample	2,851	0.156*** (0.029)
English + Maths, expanded sample	3,105	0.151*** (0.028)
English + Maths, without school type, same sample	3,105	0.150*** (0.028)
English + Maths, without school type, expanded sample	3,933	0.141*** (0.025)

Household Income Quintiles

Variable	Estimate (SE)
Fee-paying school	0.078* (0.044)
Female	0.259*** (0.029)
Prior academic ability	0.630*** (0.016)
Block grinds	−0.022 (0.038)
Income Q2	0.034 (0.062)
Income Q3	0.175*** (0.061)
Income Q4	0.258*** (0.061)
Income Q5	0.349*** (0.064)
Constant	−0.525*** (0.047)

Variable	Estimate (SE)
Ongoing grinds (Q1 reference)	0.190*** (0.073)
Ongoing grinds × Q2	−0.041 (0.105)
Ongoing grinds × Q3	−0.047 (0.097)
Ongoing grinds × Q4	−0.017 (0.092)
Ongoing grinds × Q5	0.003 (0.092)