

ミクロデータサイエンス

Problemset3

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July 24, 2024

1 Step 2 回帰分析

A write_regression_models の修正

```
1 write_regression_models <- function() {  
2   regression_models <- list(  
3     # correct model  
4     "(1)" = log10(income_child) ~ effort + log10(income_parent),  
5  
6     # omitted variables models  
7     # model 2  
8     "(2)" = log10(income_child) ~ log10(income_parent),  
9     # model 3  
10    "(3)" = log10(income_child) ~ effort,  
11  
12    # measurement error models  
13    # model 4  
14    "(4)" = log10(income_child_noisy) ~ effort + log10(income_parent),  
15    # model 5  
16    "(5)" = log10(income_child) ~ effort_noisy + log10(income_parent),  
17    # model 6  
18    "(6)" = log10(income_child) ~ effort + log10(income_parent_noisy)  
19  )  
20  
21  return(regression_models)  
22 }
```

B 回帰分析結果の解釈

Regression Table

	(1)	(2)	(3)	(4)	(5)	(6)
Own effort	1.09		1.27	1.05		1.12
	(0.17)		(0.16)	(0.17)		(0.16)
Log Parents Income	0.39	0.63		0.39	0.52	
	(0.15)	(0.14)		(0.15)	(0.15)	
Own effort with error					0.47	
					(0.12)	
Log Parents Income with error						0.35
						(0.13)
Constant	-0.68	0.27	0.92	-0.59	-0.08	-0.49
	(0.78)	(0.77)	(0.40)	(0.78)	(0.77)	(0.70)
Num.Obs.	1000	1000	1000	1000	1000	1000
Std.Errors	by: household_id	by: household_id	by: household_id	by: household_id	by: household_id	by: household_id

Heteroskedasticity robust standard errors clustered at household level