Does the Interner Accessibility Improve Student's Ability?

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Outline

Methodology(Dependent Variables)

Dependent Variable	Variable Name	Description
DV	math	Mathmatics mean score(2012)
DV	reading	Readind mean score(2012)
DV	ps	Prolem Solving mean score(2012)

Methodology(Independent Variables)

| Individent Variable	Variable Name	Description
IV	GDPperc	GDP per Capita (current US$)
IV	expend	Government expenditure on education, total (% of GDP)
IV	pop	Population, total
IV	popd	Population density (people per sq. km of land area)
IV	rteacher	Primary school pupil-teacher ratio
IV	eyear	Number of years that children are legally obliged to attend school
IV	internet	internet users (per 100

Methodology(Descriptive Statistics)

Table 3: Table: Summary statistics of the variables

Statistic	N	Mean	St. Dev.	Min	Ma
math	63	469.743	52.225	368.103	573.4
reading	63	471.675	45.780	384.151	544.6
ps	42	485.544	44.181	399.166	562.4
GDPperc	63	31,350.570	28,867.050	1,754.548	149,16
pop	63	36,014,700.000	60,090,250.000	36,791	314,102
popd	63	635.244	2,625.005	2.959	18,654
rteacher	51	15.061	4.335	7.444	28.0
eyear	62	10.226	1.750	6	14
expend	39	4.897	1.270	2.922	7.65
internet	63	66.580	18.362	14.520	96.2
mobile	63	128.770	33.182	79.568	289.7

Analysis

Table 4: Table:Detarminants of Student's Ability

	math			
	(1)	(2)	(3)	(4)
log(GDPperc)	29.666***	22.703**	−7.883	27.480***
	(5.794)	(9.524)	(10.680)	(5.174)
log(pop)	1.642	7.587	11.018**	3.107
	(3.249)	(6.643)	(5.264)	(2.901)
popd	0.004*	0.005	0.003	0.002
	(0.002)	(0.003)	(0.004)	(0.002)
rteacher		−4.035	−0.956	
		(2.616)	(2.173)	
eyear		−8.544	−7.042	
		(5.699)	(4.473)	
expend		11.785	−2.215	
		(7.097)	(6.412)	
internet			2.522***	
			(0.602)	
mobile			0.452	
			(0.319)	
(intercept)	145.762	216.904	240.336	146.816*
	(87.914)	(156.559)	(143.650)	(78.509)
Observations	63	34	34	63
R^2	0.388	0.451	0.690	0.365
Adjusted R^2	0.357	0.338	0.591	0.332

Analysis of Problem Solving

Internet Users and Problem Solving

Analysis of Score Growth
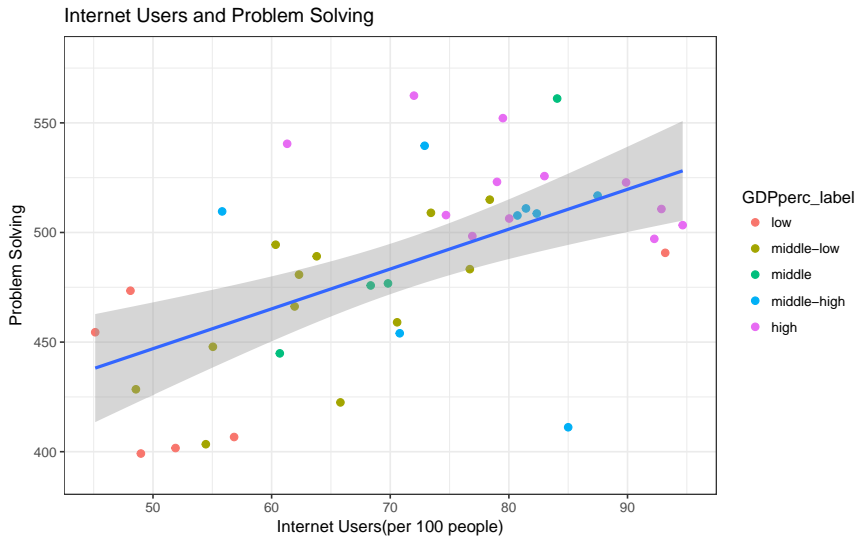
Internet Users and PS Score Growth

Analysis of Score Growth
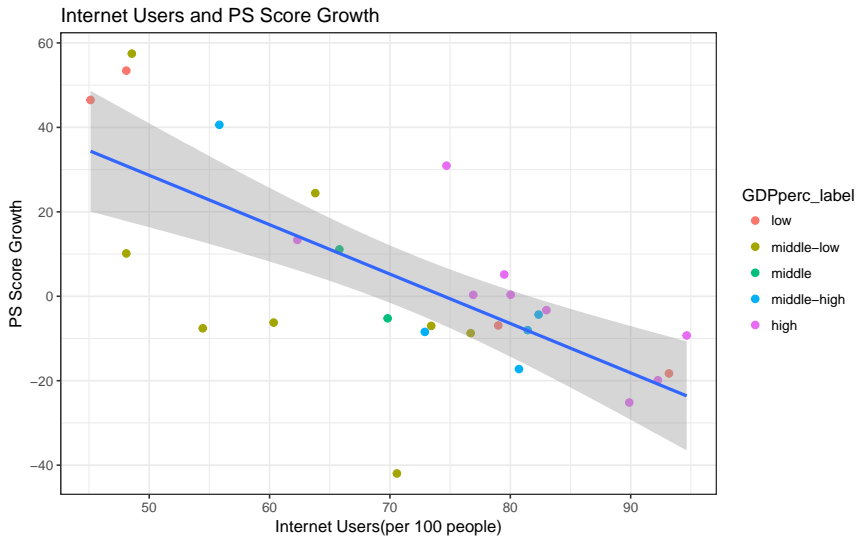
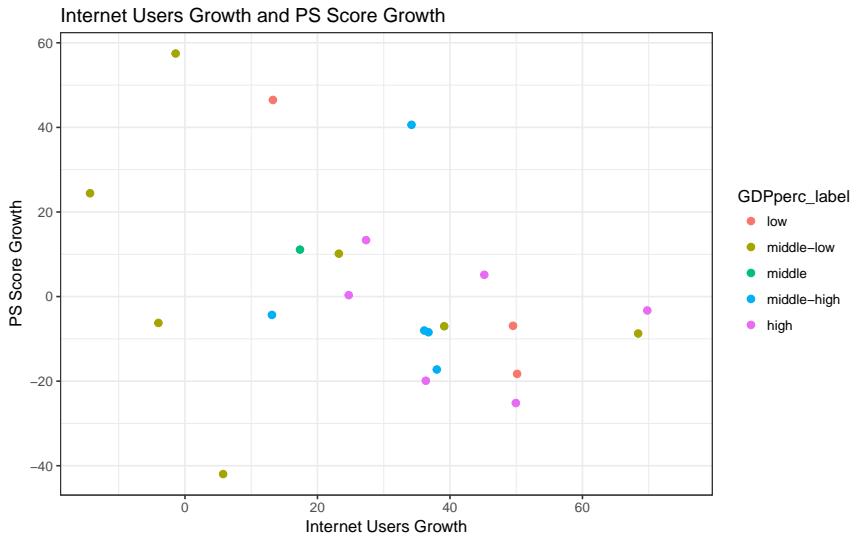Internet Users Growth and PS Score Growth

Finding and Limitation

Finding

- Internet accessiblity could have a strong impact on student's ability.
- However, the impact could be weaker on problem solving ability than academic ability.

Limitation

- small sample size
- Data limitation