

Does the Internet Accessibility Improve Student's Ability?

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Outline

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- 3 Data
- 4 Methodology
- 5 Analysis
- 6 Result

Dependent Variables

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

Methodology

Indivendent Variables

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

Methodology(Descriptive Statistics)

Table 3: Table: Summary statistics of the variables

Statistic	N	Mean	St. Dev.	Min	Max
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	32,608.030	29,376.850	1,754.548	149,160
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: Variance Inflation Factors for Math

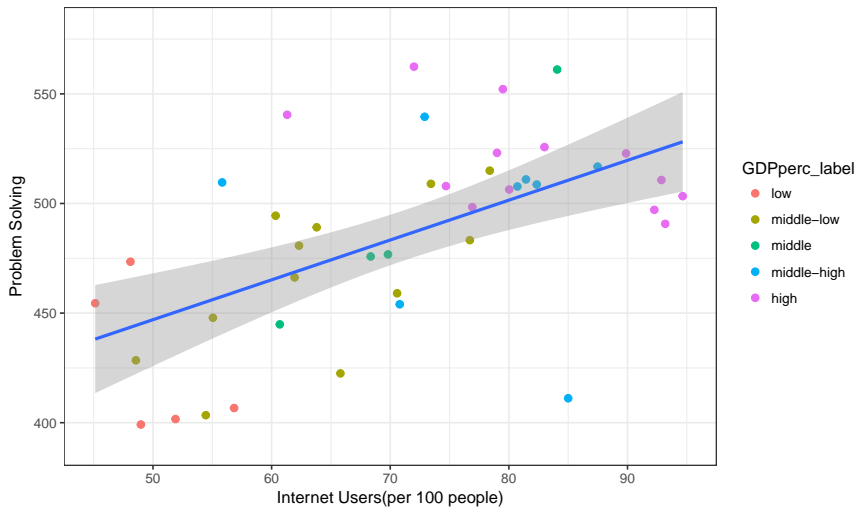
log(GDPperc)	log(pop)	popd	rteacher	eyear	expend	internet
4.999	1.729	4.718	1.912	1.113	1.363	4.887

Table 5: Variance Inflation Factors for Reading

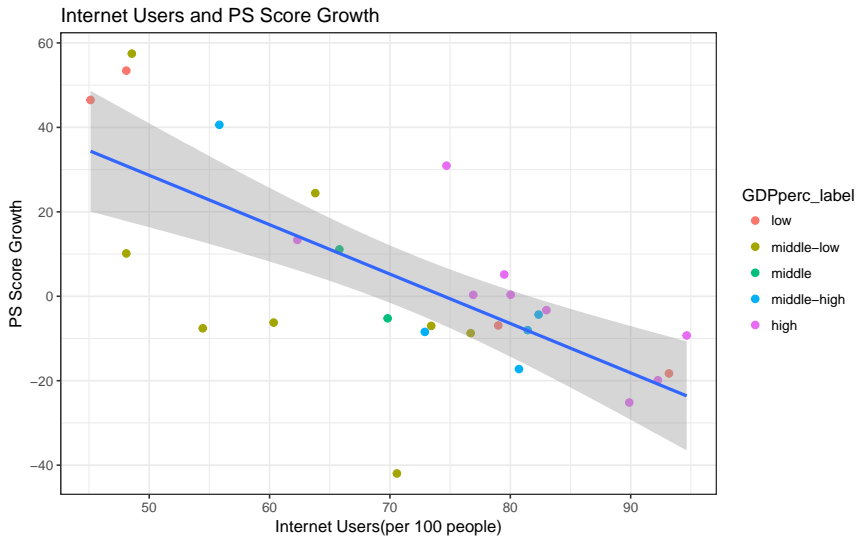
log(GDPperc)	log(pop)	popd	rteacher	eyear	expend	internet
4.999	1.729	4.718	1.912	1.113	1.363	4.887

Analysis of Problem Solving

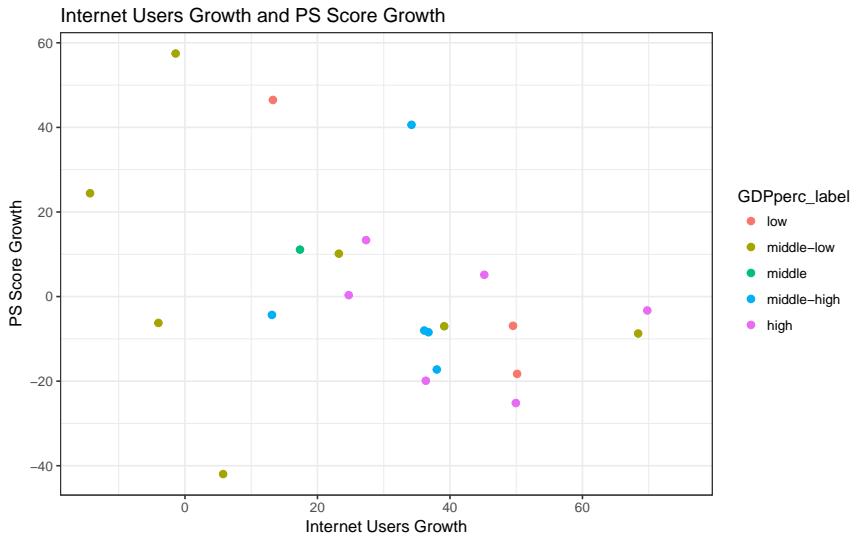
Internet Users and Problem Solving



Analysis of Score Growth



Analysis of Score Growth



Finding and Limitation

Finding

- Internet accessibility 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