

# Higher Education Spending's Effect on Violent Crime

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## Introduction

Violent crime has been on the rise in recent months, and many different factors exist that contribute to it. Likewise, there are many remedies for addressing violent crime, one of the most notable being education. There have been many previous studies conducted on the relationship between education and crime, ranging from educational attainment to opportunities that are available following education. The topic that I have chosen for study is increased spending on higher education and the effect it has on crime rate. Using Census data and FBI crime statistics, this study will analyze the effect that higher education spending has on the violent crime rate for all 50 states.

## Research Question and Hypothesis

**Research Question:** What effect does increased spending on higher education have on the violent crime rates of states?

**Hypothesis:** Higher Education spending  $\uparrow$ , violent crime rate  $\downarrow$

## Research Design

The sample for this study is all fifty states in the U.S., and primary data collection came mainly from sources such as the Census' American FactFinder and the FBI's crime statistics, both of which contain various information statistics for each state. The key independent and dependent variables are the average higher education spending and violent crime rate, respectively. In order to make sure for certain that higher education spending is the variable that is affecting the crime rate, several variables were controlled in this study, such as the average public tuition, family income, poverty rate, race, unemployment rate for young people, inequality, percent of population aged 18-24, percent of population who live in urban areas, as well as cultural factors, such as percent of children living with a single parent and percent of children born out of wedlock. All data analysis was strictly quantitative in nature, and all statistical tests were run using SPSS.



## Results

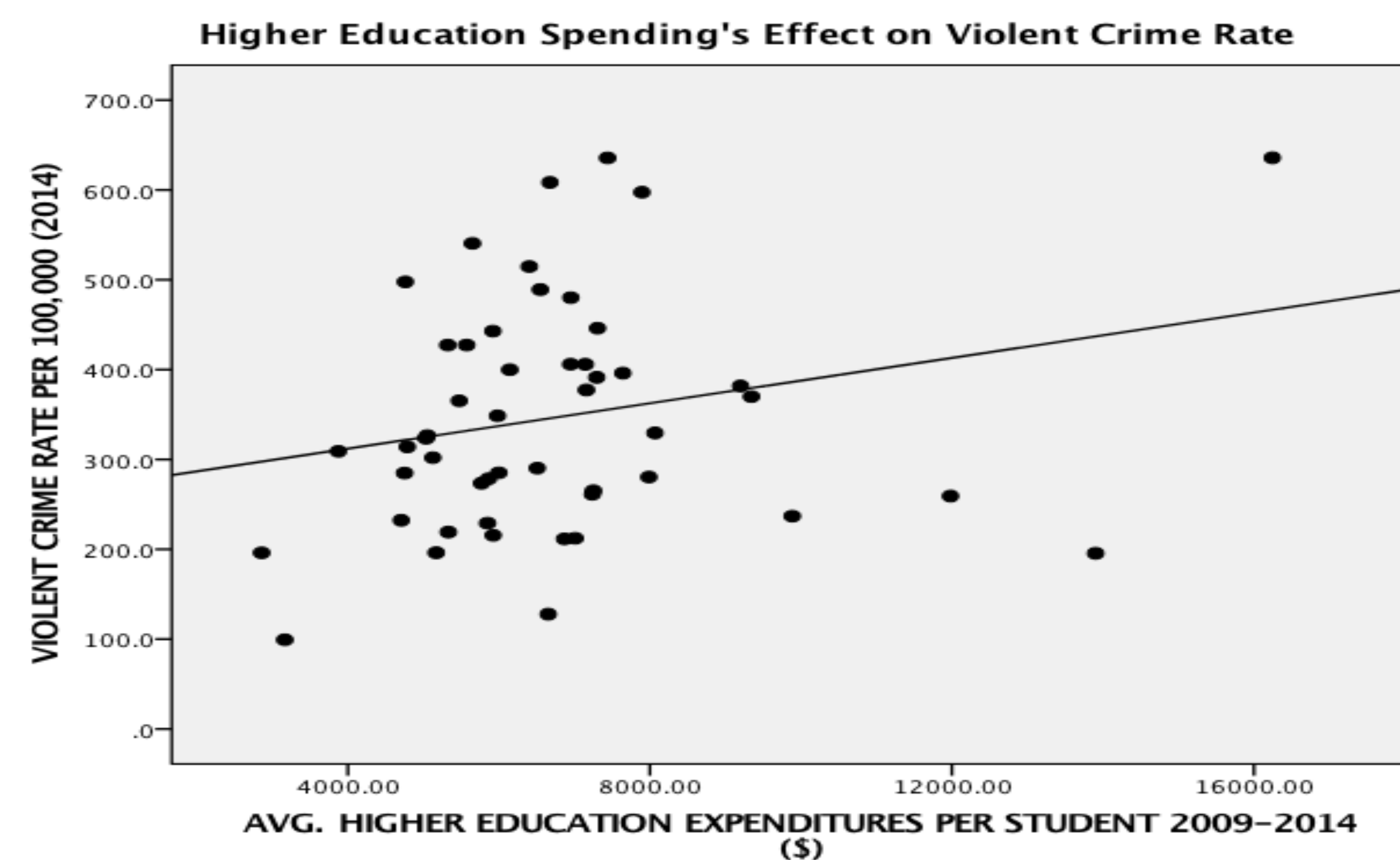
**Hypothesis:** Not supported. There is no significant relationship between spending on higher education and violent crime rate. Percent of the population who live in urban areas has the most significant relationship with the crime rate.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.232 <sup>a</sup>	.054	.034	126.5878

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	261.555	54.501		4.799	.000
1	AVG. HIGHER EDUCATION EXPENDITURES PER STUDENT 2009-2014 (\$)	.013	.008	.232	1.656	.104

a. Dependent Variable: VIOLENT CRIME RATE PER 100,000 (2014)



**Table 1 and 2, Figure 3.** Regression analysis of higher education spending and crime rate, without control variables.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
VIOLENT CRIME RATE PER 100,000 (2014)	Equal variances assumed	1.679	.201	-1.375	48	.176	-49.6440	36.1091	-122.2461	22.9581
	Equal variances not assumed			-1.375	44.917	.176	-49.6440	36.1091	-122.3751	23.0871

**Table 4.** Comparison of Means T-test between higher education spending and crime rate, without control variables.

## Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.734 <sup>a</sup>	.539	.406	99.2917

## Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	228.927	514.106		.445	.659
1	Avg. Higher Education Expenditures per Student 2009-2014 (\$)	.015	.008	.281	1.799	.080
1	Avg. Public Tuition Flagship Univ. (\$)	-.003	.007	-.058	-.356	.724
1	Gini Index	-1307.133	1758.327	-.193	-.743	.462
1	Mean Family Income	-.001	.004	-.061	-.142	.888
1	Pct. Below Poverty Level	12.305	19.409	.301	.634	.530
1	Pct. Black	1.718	2.301	.128	.747	.460
1	Percent of Children living with a single parent	17.887	10.221	.722	1.750	.088
1	Percent of Children born out of wedlock	-3.304	6.952	-.176	-.475	.637
1	Pct. of Population that live in urban areas	3.792	1.329	.429	2.853	.007
1	Unemployment Rate of young people (16-24)	-13.112	6.611	-.340	-1.983	.055
1	Pct. Age group 18-24	-7.653	24.553	-.038	-.312	.757

a. Dependent Variable: Violent Crime Rate per 100,000 (2014)

**Table 5 and 6.** Regression analysis of higher education spending and crime rate while controlling for other variables.

## Discussion

In previous studies that were conducted, many scholars concluded that education is the key to reducing crime rate. However, in my research, I have concluded that all the factors that contributed to crime rate, such as economic and cultural, have no significant relationship with crime rate as all. Without controlling for outside factors, spending on higher education has no significant relationship with violent crime rate, since in both statistical tests, there is more than a 5% chance that the relationship occurs by mere chance. On the other hand, when controlling for other factors, the higher education spending and violent crime relationship has a 8% possibility of merely happening by chance. Likewise, the relationship between the percent of children living with a single parent and violent crime has a 8.8% possibility of happening by chance. The unemployment rate for young people and violent crime relationship has a 5.5% possibility of happening by chance. However, the only variable that has a significant relationship with the violent crime rate is the percent of the population who live in urban areas, since there is only a .7% chance that this relationship happens by chance. Therefore, this relationship could be explained by the fact that urban areas tend to have a higher population density than rural areas, and there are more societal factors that contribute to it as well.