Suicide

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BA630 Report Writing

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Introduction

This research paper attempts to answer the question, to what degree does the Divorce Rate, Percent of Sunny Days, No Insurance Rate, Poverty Rate, and Unemployment Rate contribute to the Suicides Rate?

In the U.S., approximately 30,000 people commit suicide every year. People who commit suicide are seeking a solution to a problem. They have feelings of hopelessness and helplessness.

> *"Even though we may rationally believe that suicide fixes nothing, to someone who is suicidal, it appears like a real answer to all or most of their problems. No money, no job? End my life and stop being a burden on society. The cause of pain to someone you love? End my life and stop being a source of pain to that person. Feelings of depression that seem not only to never end, but get worse with every passing day? End my life and stop feeling so much emotional pain (Grohol, 2007)."*

To what degree do our independent variables contribute to the mindset of depression. Awareness of cause and effect could contribute to prevention. This report aims for readers to gain a better understanding of what does and does not contribute to the problem.

Data & Model

Define Sample:

States of the United States (Sample size - forty four): For the following analysis, the sample is forty four States of the United States between 2006 and 2009. To avoid skewed results, 50 states were reduced to 44 for not reporting data in the Divorce category. The characteristics chosen as variables, their relationship, source information, and our theory are as follows:

Dependent Variable:

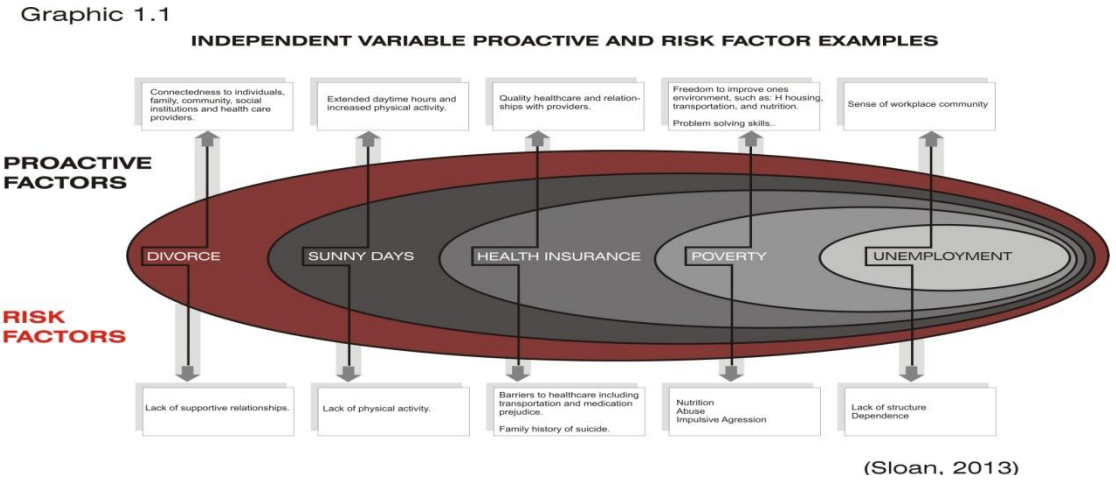
Age-Adjusted Death Rate by Suicide Rate in 2008 (per 100,000, Age-adjusted rates based on year 2000 standard population) (Dependent Variable): Suicide is the act of killing oneself intentionally (source data are death certificates: by own hand, actual cause, or nothing at all) . Age adjustment is a statistical process applied to the suicide rate that allows communities with different age structures to be compared. SEE source for mathematical process: (Health, 2013)

Primary Source Data: Death Certificates from U.S. Dept. of Health and Human Services, Nat'l Center for Health Statistics, "National Vital Statistics Reports" (Vol. 57, No. 14, April 17, 2009). http://www.cdc.gov/nchs/deaths.htm

Theory: As demonstrated in the introduction, many factors contribute to depression leading to suicide. Our theory suggests, that our chosen variables correlate positively to the suicide rate.

Independent Variables:

Graphic 1.1



Divorce Rate in 2008 (Annual Divorces per 1,000 Population) (Independent Variable): In the US, divorce is a judicial declaration dissolving a marriage in whole or in part, especially one that releases the marriage partners from all matrimonial obligations. (Dictionary.com)

Primary Source Data: U.S. Dept. of Health and Human Services, Nat'l Center for Health Statistics "National Vital Statistics Reports" (Vol. 57, No.19, July 29, 2009). National rate is only for reporting states. Divorces were not reported for California, Georgia, Hawaii, Indiana, Louisiana, and Minnesota. No reason was given. http://www.cdc.gov/nchs/data/nvsr57/nvsr57_19.pdf

Theory: Keven Caruso of Suicide.org says that it is extremely common for people to become depressed over a divorce, and untreated depression is the number one cause for suicide. Thus, a divorce can significantly increase a person's risk for suicide. One study by the National Institute for Healthcare Research indicates that divorced people are three times as likely to die by suicide as people who are married.

Percent of Sunny Days (Independent Variable) (Annual): Percent of days the sun shines in a year. Of the 50 states, 42 are from two or more reporting cities and the remaining are from a single location. The National Oceanic and Atmospheric Administration definition of a sunny day is vague and is dependent on the National Weather Service as follows (Key Word Search): The Operations Manual defines fair as "less than four tenths [of the celestial dome] opaque, no precipitation, no extreme conditions of visibility, wind or temperature, and generally pleasant weather." (Service, 2013)

PrimarySource Data: United States Dept. of Commerce, Nat'l Oceanic and Atmospheric Admin NOAA. "Comparative Climate Data" (annual). http://www.ncdc.noaa.gov/oa/climate/online/ccd/pctpos.txt

Theory: Chris Thompson, Director of Healthcare at the Priory Group says, sunlight-driven changes in levels of the feel good chemical serotonin may make people more aggressive and, if they are depressed, they could direct that aggression at themselves. The theory gains some support from research by Canadian scientists linking seasonal changes in bright sunlight with more violent suicides.

Other researchers believe that the influence of sunlight on another hormone, melatonin, is to blame. Sunlight inhibits production of melatonin, which is known to influence our behavior.

Percent of Population NOT Covered by Health Insurance in 2008 (Independent Variable)(Annual): Health Insurance is defined as government and private. Private Health Insurance is coverage by a health plan provided through an employer or union or purchased by an individual from a private health insurance company. Government health insurance includes plans funded by governments at the federal, state, or local level. The major categories of government health insurance are Medicare, Medicaid, the Children's Health Insurance Program (CHIP), military health care, state plans, and the Indian Health Service. (Definition, 2013)

Source Title: Percent of Population Not Covered by Health Insurance in 2008, National Percent = 15.5 of Population, Source Data: U.S. Bureau of the Census. http://www.census.gov/hhes/www/hlthins/hlthin08.html

Theory: Access to therapists and doctors are essential to treating depression. Suicide is not often preceded by warnings, and getting help begins with detection. This report hopes to shine light on cause and effect that can lead to increased public awareness.

Table 1.1 Poverty, Healthcare, and Depression

	In Poverty	Not in Poverty	Difference (pct, pts.)
% Depression	30.9	15.8	15.1
% Asthma	17.1	11.0	6.1
% Obesity	31.8	26.0	5.8
% Diabetes	14.8	10.1	4.7
%High Blood Pressure	31.8	29.1	2.7
% Heart Attacks	5.8	3.8	2.0
% Cancer	6.3	7.1	-0.8
% High Cholesterol	25.0	26	-1.0

(Abrams, 2012)

Poverty Rate in 2008 (Independent Variable)(Annual): Poverty is a state of privation, or a lack of the usual or socially acceptable amount of money or material possessions. The most common measure of poverty in the U.S. is the "poverty threshold" set by the U.S. government. The poverty threshold for a family of four (two children) in 2008 was $21,234 (Census, 2013)

Primary Source: U.S. Bureau of Census. http://www.census.gov/acs/www/index.html

Theory: Base on source Abrams 2012, this study believes that poverty leads to depression that leads to suicide. Abrams found a variety of chronic health problems disproportionately affecting the poor, with the incidence of depression showing the strongest disparity: 31 percent of Americans under the U.S. Census Bureau's poverty threshold in 2011 had been diagnosed with the disorder, as opposed to 15.8 percent of those not in poverty. See Table 1.1

Unemployment Rate in 2009 (Independent Variable)(Annual): Unemployment is the number of unemployed workers, as a percentage of the total labor force. It includes private and government workers.

Source Data: U.S. Department of Labor, Bureau of Labor Statistics "Regional and State Employment and Unemployment" (press release, January 22, 2010). www.bls.gov/bls/newsrels/htm

Theory: Men are 4 times more likely to commit suicide than women. Men and women have an inherent need to provide for their families, and employment makes that possible. In addition, idol (inactive) time spent at home not working promotes depression. Being unemployed leads to depression and suicide. Unemployment doesn't always however mean that one is without financial resources such as savings, retirement, unemployment benefits, or welfare.

Descriptive Statistics

In this study, Descriptive statistics are used to describe the basic features of the data. The simple summaries are the variables, number of states, minimum and maximum and mean of each state for the respective variable, and the standard of measurement which are units of standard deviation.

Table 1.1a Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Suicide	44	6.5	21.7	12.795	3.6022
Divorce	44	2	7	3.71	.909
SunnyDays	44	38	85	58.84	9.206
HealthIns	44	7.1	24.9	14.136	3.8243
Poverty	44	7.6	21.0	12.743	2.9923
Unemployment	44	4.4	14.6	8.964	2.2830
Valid N (listwise)	44				

(Sloan, 2013)

The following examples relate specifically to the mean, units of measurement and Std. Deviation segment of Table 1.1a:

Suicide: Per 100,000 population, mean of entire sample of 44, there was an annual average of 12.795 suicides. A standard deviation of 3.6 signifies the extent of deviation in each state of the sample as a whole (3.6 = moderate/low). For variable definitions, see the Independent Variable section above.

Divorce: Per 1,000 population, mean of entire sample of 44, there was an annual average of 3.71 divorces. Standard deviation is low at .909.

SunnyDays: Percent of sunny, mean of entire sample of 44, there was an annual state average of 58.85%. Standard deviation is high at 9.206. States like Arizona and Florida with a lot of sunshine skew data toward an upward trend.

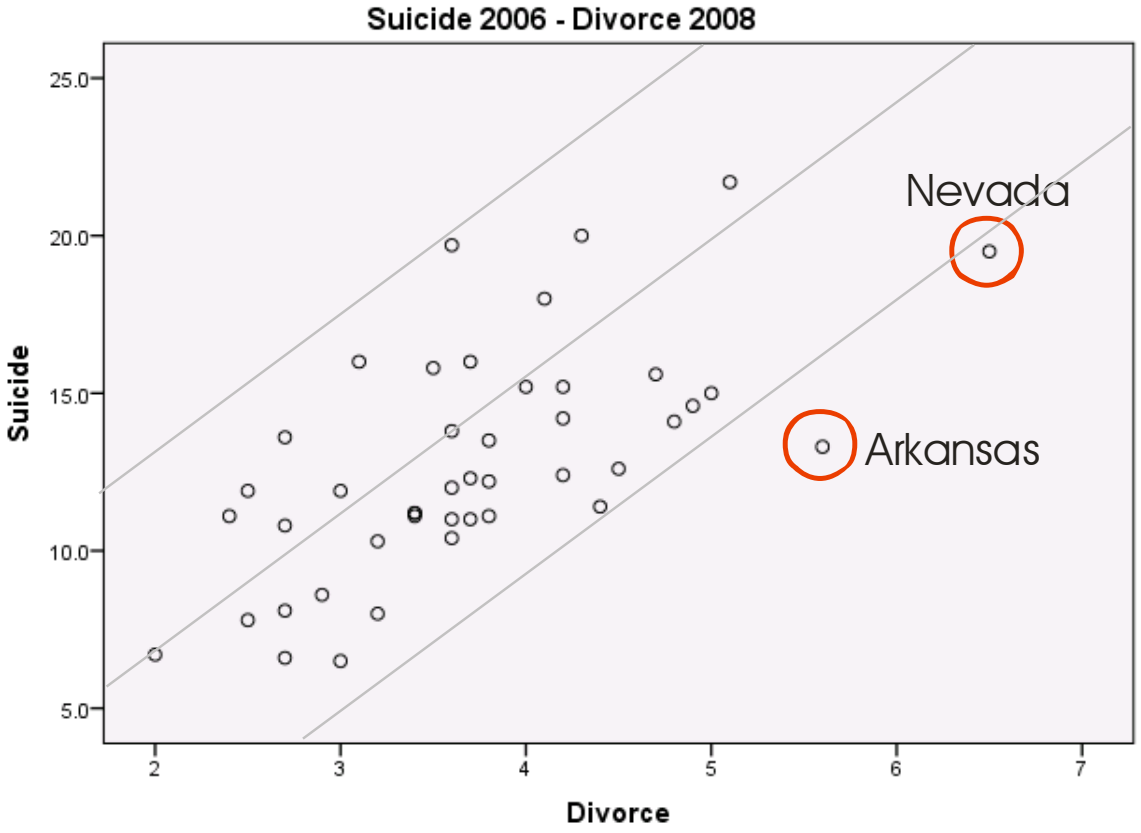
HealthIns: **No** Health Insurance: Percent of population, mean of entire sample of 44, there was an annual average of 14.136 %. Standard deviation is low to moderate at 3.8.

Poverty: Percent in poverty, mean of entire sample of 44, the was an annual average of 12.743%. Standard deviation is low to moderate at nearly 3.

Unemployment: Percent unemployed, mean of entire sample of 44, the was an annual average of nearly 9%. Standard deviation is low at nearly 2.28830.

Simple Scatter Plots (Relationships and Estimated Outliers of X and Y)

Graphic 2.1 Estimated Outliers



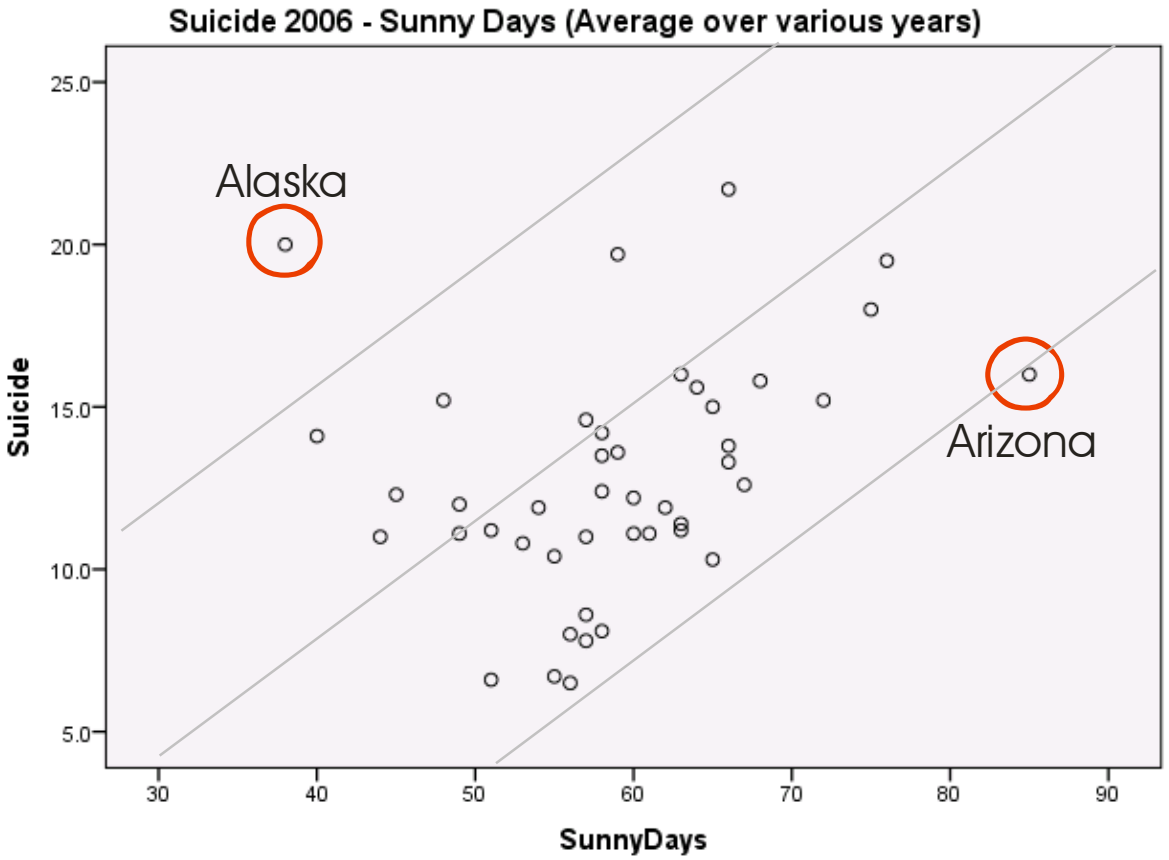
(Sloan, 2013)

Observation: Relationships: Visually, it appears that Suicide rate and Divorce rate form an upward linear slope. More Divorces results with more Suicides.

Possible Outliers: Arkansas (4), Nevada (22)

Theory: If we removed Nevada and Arkansas, it appears the linear slope would increase slightly. Of Arkansas and Nevada, Nevada has the highest Y and X value. Why this might be is Nevada promotes a simplified marriage and divorce process. There are higher Y values in the graph, but they would less likely effect the linear slope, and in those cases, more divorces don't cause more suicides, as in Nevada's case. Arkansas shows more divorces result in an average suicide rate by scale.

Graphic 2.2 Estimated Outliers



(Sloan, 2013)

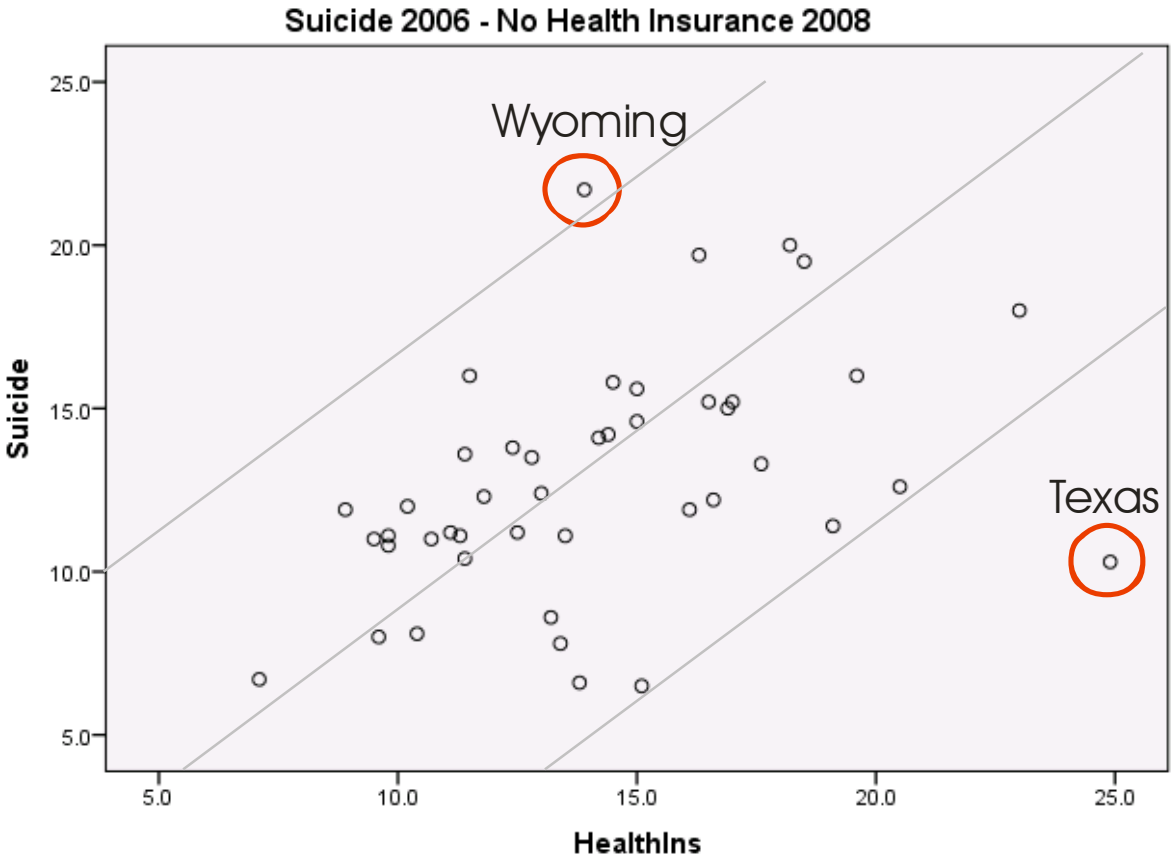
Observation: Relationships: It appears that the Suicide rate and percent of Sunny Days form a upward linear slope. More Sunny Days means more Suicides.

Possible Outliers: Alaska (2), Arizona (3).

Theory: Estimated outliers in Graphic 2.2 appear to be quite clear. Alaska has the highest Y value while Arizona has the highest X value. If both were removed, the upward slope could offset and remain the same. Do percent of sunny days result in more suicides, in Alaska's case no, but as an average, moderately yes.

This data is unexpected, unless older people without health Insurance commit more suicides in sunny states like Arizona, Nevada, Texas, and Florida. Unfortunately our suicide data does not isolate age specifics. This could be a case made for further analysis.

Graphic 2.3 Estimated Outliers



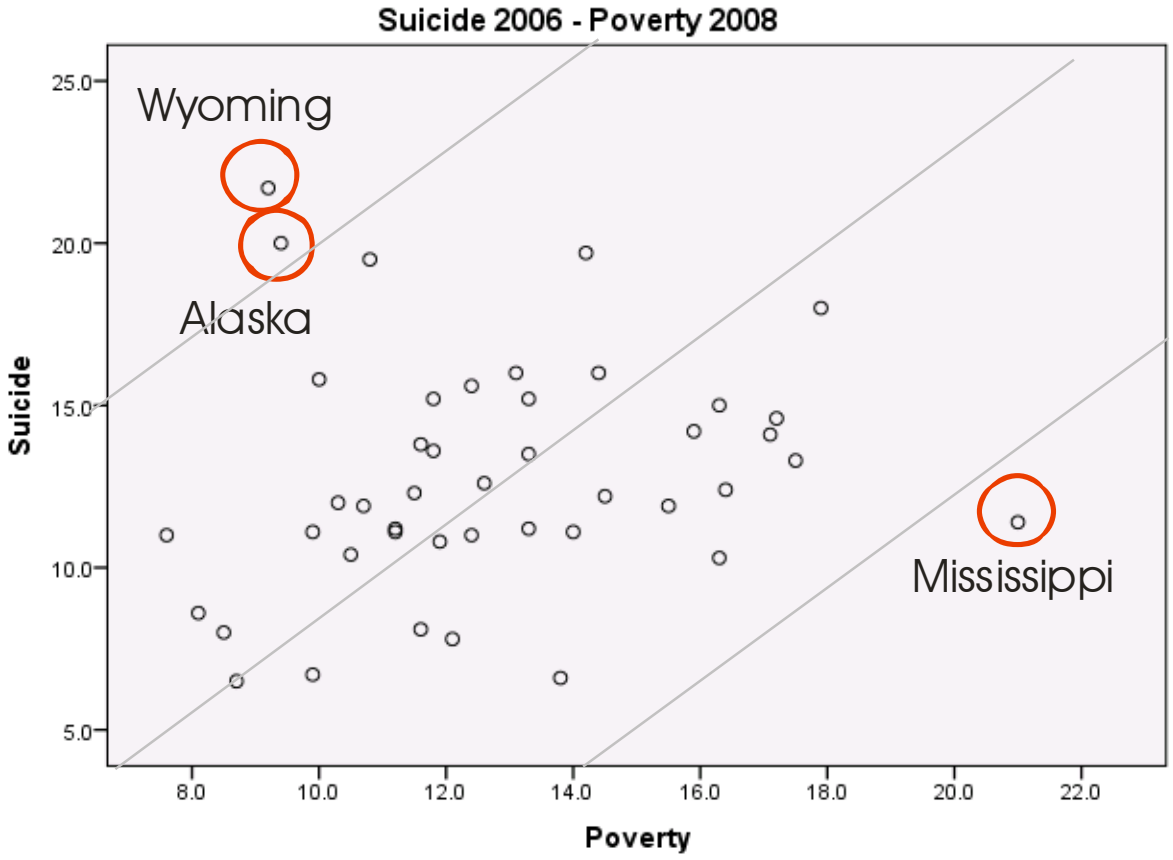
(Sloan, 2013)

Relationships: It appears that the Suicide rate and percent ofNo Health Insurance form a upward linear line. More Sunny Days correlates positive with No Health Insurance.

Possible Outliers: Texas (37), and Wyoming (44)

Theory: Graphic 2.3 demonstrates that Wyoming is an outlier by way of its Y value while Texas is an outlier by way of its X value. If both were removed it appears the line would increase slightly. This data potentially supports the percent of sunny days graph in that if we were to assume older people in sunny states (Texas) ran out of health insurance and thus committed suicide. This theory is supported again as further research tells us that the first case above and left of Texas in the sunny/No Health Insurance state of New Mexico.

Graphic 2.4 Estimated Outliers



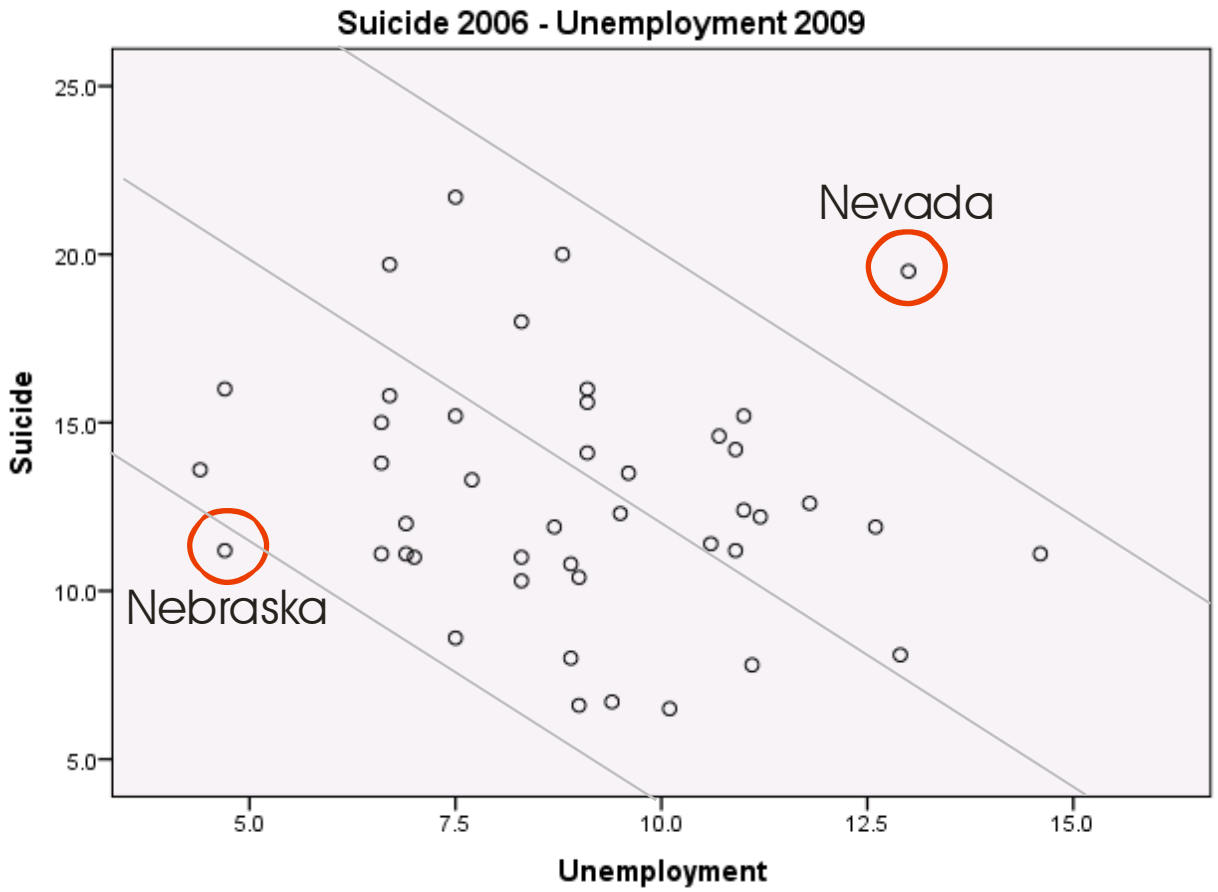
(Sloan, 2013)

Relationships: It appears that Suicide and Poverty form a upward linear slope. More Poverty correlates positive with Suicides.

Possible Outliers: Alaska (2), Mississippi (18), Wyoming (44)

Theory: Graphic 2.4 demonstrates that Alaska, Mississippi, and Wyoming could potentially be outliers. Wyoming and Alaska have high Y values while Mississippi has a lower Y value and high X value. If all three we removed, it appears the linear line would increase slightly. This graph tells us that Mississippi is a poor state and that doesn't mean poverty necessarily contributes to suicide. Wyoming and Alaska are not poor and support that assertion.

Graphic 2.5 Estimated Outliers



(Sloan, 2013)

Relationships: It appears that Suicide and Unemployment form a downward linear slope. More Unemployment correlates negatively with Suicides, which is a surprise.

Possible Outliers: Nebraska (21), Nevada (22)

Theory: It appears that if removed, Nevada and would effect the linear slope most. Nevada has the highest Y and X value combined. If both were removed, it appears the slope would decline slightly by way of Nevada's pull upward.

This has an unexpected result. It suggests that unemployed people are less depressed. This raises questions about substitute revenue such as savings, government subsidies, crime, and more. Assuming money buys happiness, where are people getting their money?

Simple Scatter Plots: Nonlinearity: Of our samples, non showed signs of nonlinearity (an exponent greater than one). There appears to be relationships of direct proportion.

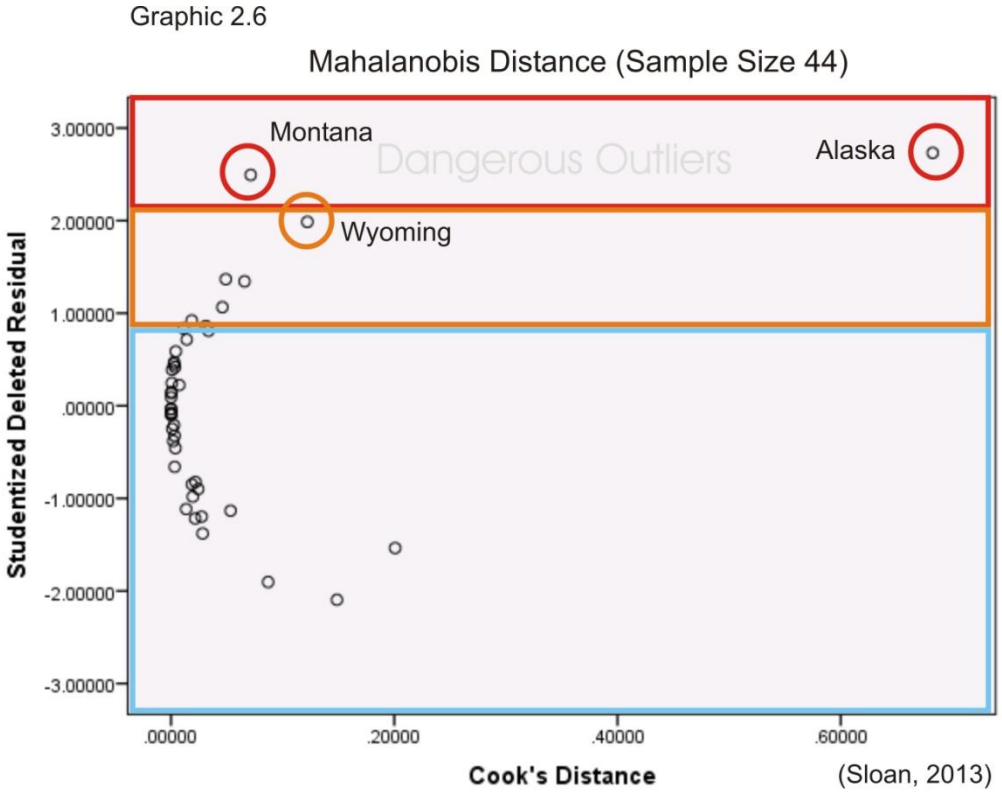
Results

R Squared (interpret and discuss): Our R Squared value of .515 indicates our independent variables explain 51.5% of the variation in suicide rates between states. 48.5% remains unexplained by way of variables not evaluated in this report.

F Test (interpret): We reject the hypothesis that all the variables had no effect. In percentages, there is a 99.9% chance our variables did have an effect on suicide rates.

X Outliers (Mahalanobis Distance): Mahalanobis Regression measures each of all points along the X axis at once. Using this analysis, Graphics 2.6 demonstrates that of the 44 states, Montana and Alaska range highest above our tolerance of relationships of 22 and thus should be removed for further study. While we previously estimated Alaska as an outlier in our simple scatter plots, Montana is a surprise.

Graphic 2.6



(Sloan, 2013)

Relationships: Measuring the relationship of the Y outliers along the X Axis shows Alaska and Montana as an outliers at nearly 2.4 and 2.7 standard deviation respectively, which is above our tolerance level of 2.0 Std. Deviations.

Theory: It appears that Alaska is the most dominant outlier, and if removed would most change the slope. Why are Alaska, Montana, and Wyoming so high? Could large traditional/conservative states with a low ratio of population to land promote the rate of suicide. This could call for further investigation in gun registration, conventionalism, and land/population ratios,.

Table 1.2 Isolate Outliers

All Variables	Descriptive Statistics (Mean)	Alaska	Montana
Suicide	12.795	20	19.5
Divorce	3.71	4.3	3.6
Sunny Days	58.84	38	59
No Health Ins.	14.136	18.2	16.3
Poverty	12.743	14.2	9.4
Unemployment	8.964	6.7	8.8

(Sloan, 2013)

In isolating our two outliers, Table 1.2 demonstrates that the Suicide Rate deviates significantly, and No Health Insurance moderately, away from the mean of the sample. We conclude that in the case of Montana, there were other factors contributing beyond the scope of our independent variables. Again, Alaska was expected from the simple plots.

Y Outliers: Case wise Diagnostics, Cook's, SDRs

Coefficients Sample Size 44

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.825	3.446		1.400	.170
	Divorce	2.362	.515	.596	4.584	.000
	SunnyDays	.022	.051	.056	.427	.672
	HealthIns	.171	.148	.182	1.152	.257
	Poverty	-.075	.163	-.063	-.463	.646
	Unemployment	-.396	.188	-.251	-2.104	.042

Coefficients Sample Size 42

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.609	3.225		-.189	.851		
	Divorce	2.327	.433	.648	5.370	.000	.753	1.327
	SunnyDays	.122	.051	.324	2.375	.023	.589	1.698
	HealthIns	-.093	.143	-.107	-.649	.520	.401	2.493
	Poverty	.063	.146	.057	.430	.670	.628	1.592
	Unemployment	-.254	.161	-.176	-1.575	.124	.877	1.140

a. Dependent Variable: Suicide

Divorce:

The estimated coefficient for the divorce variable is 232.7. This has an expected positive sign, which implies that the suicide rate increases when the divorce rate increases. Specifically, if the Divorce rate goes up by one per 1,000 population then suicides will increase by 232.7 per 100,000. The probability that the divorce rate has no effect on the suicide rate, which is .000, is less than 10%. I would reject the hypothesis of no effect and conclude with more than 99.9% confidence that divorce does have an effect on suicide. The Standardized Coefficient means that the suicide rate will change by 0.648 standard deviations when the divorce rate changes by one standard deviation, which is a large relative response. Divorce is the largest value of the independent variables.

Sunny Days:

The estimated coefficient for the Sunny Days variable is 12.2. This has an unexpected positive sign, which implies that the suicide rate increases when the percent of Sunny Days increases. Specifically, if the Sunny Days goes up by one percent then suicides will increase by 12.2 per 100,000. The probability that the Sunny Days has no effect on the suicide rate is 2.3 which is less than 10%. I would reject the hypothesis of no effect and conclude with more than 97.7% confidence that Sunny Days have an effect on suicide. The Standardized Coefficient means that the suicide rate will change by 0.324 standard deviations when the Sunny days changes by one standard deviation, which is a medium relative response. Sunny Days is the third largest value of the independent variables.

No Health Insurance:

The estimated coefficient for the No Health Insurance variable is -9.3. This has an unexpected negative sign, which implies that the suicide rate decreases when the percent of No Health Insurance increases. Specifically, if the No Health Insurance goes up by one percent then suicides will decrease by -9.3 per 100,000. The probability that the No Health Insurance rate has no effect on the suicide rate is 52.0 which is more than 10%. I would reject the hypothesis of no effect. The Standardized Coefficient means that the suicide rate will change by -.107 standard deviations when the No Health Insurance changes by one standard deviation, which is a small relative response. No Health Insurance is the fourth largest value of the independent variables.

Poverty:

The estimated coefficient for the Poverty variable is 6.3. This has an expected positive sign, which implies that the suicide rate increases when the percent of Poverty increases. Specifically, if the Poverty goes up by one percent then suicides will increase by 6.3 per 100,000. The probability that the Poverty has no effect on the suicide rate is 67.0 which is more than 10%. I would reject the hypothesis of no effect. The Standardized Coefficient means that the suicide rate will change by .057 standard

deviations when the Poverty changes by one standard deviation, which is a small relative response. Poverty the fifth largest value of the independent variables.

Unemployment:

The estimated coefficient for the unemployment variable is -25.4. This has an unexpected negative sign, which implies that the suicide rate decreases when the unemployment rate increases. Specifically, if the unemployment rate goes up by one per 1,000 population then suicides will decreases by -25.4 per 100,000. The probability that the unemployment rate has no effect on the suicide rate is 12.4 which is more than 10%. Because 10% and 12.4 are so close, I would make an exception and reject the hypothesis of no effect and conclude with more than 87.6% confidence that unemployment does have an effect on suicide. The Standardized Coefficient means that the suicide rate will change by -.176 standard deviations when the divorce rate changes by one standard deviation, which is a small relative response. Unemployment is the second largest value of the independent variables.

Problem: Multicollinearity (Sample Size 42, Alaska and Montana Removed)

Coefficients Sample Size 42

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.609	3.225		-.189	.851		
	Divorce	2.327	.433	.648	5.370	.000	.753	1.327
	SunnyDays	.122	.051	.324	2.375	.023	.589	1.698
	HealthIns	-.093	.143	-.107	-.649	.520	.401	2.493
	Poverty	.063	.146	.057	.430	.670	.628	1.592
	Unemployment	-.254	.161	-.176	-1.575	.124	.877	1.140

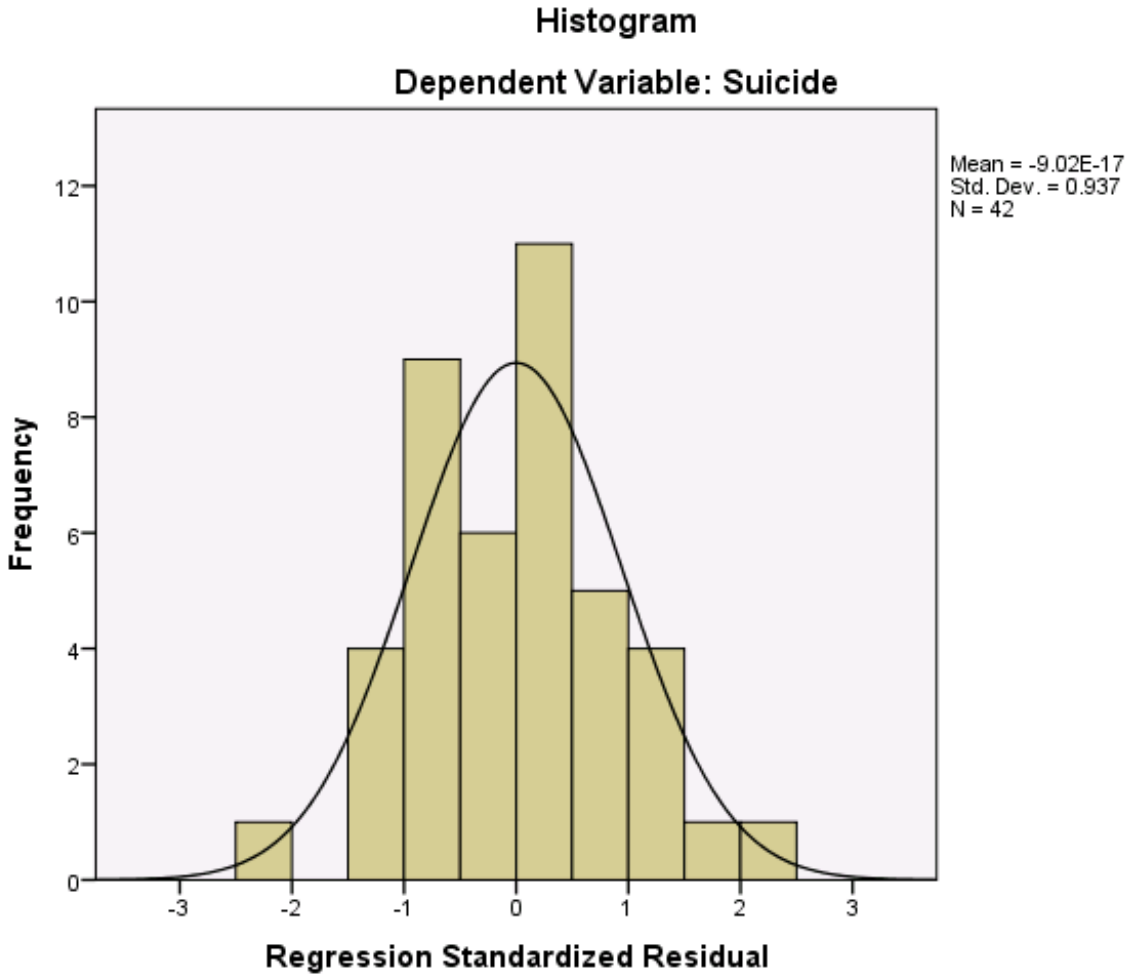
a. Dependent Variable: Suicide

From Table Coefficient Sample Size 42, section Collinearity Statistics/Tolerance, Health Insurance is the smallest at .401. There is no more than a 40.1 difference from the others. Unemployment is highest at .877 or 87.7%. There are none below .2.

Problem: Non-Normality of Results (Outlier Removed, Sample Size 42)

Graph 2.7 The histogram for the residuals looks normal.

Graph 2.7



(Sloan, 2013)

Problem: Simultaneous Equations: How did variables effect each other?

Divorce (X1): The suicide of a loved one, related or not related, can lead to divorce.

SunnyDays (X2): Suicide does not lead to more sunny days.

No Health Insurance (X3): If the provider of a family commits suicide, the rest of the family can lose their health insurance. Still, suicide does not significantly contribute to no health insurance.

Poverty (X4): Suicide does not significantly lead to increased poverty rate with the small exception provided in the no health insurance segment directly above.

Unemployment (X5): Suicide does not cause a significant increase in unemployment.

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Sample 44 Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Unemployment, SunnyDays, Divorce, Poverty, HealthIns[b]	.	Enter

a. Dependent Variable: Suicide

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.718[a]	.515	.451	2.6681

a. Predictors: (Constant), Unemployment, SunnyDays, Divorce, Poverty, HealthIns

b. Dependent Variable: Suicide

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	287.446	5	57.489	8.076	.000[b]
	Residual	270.513	38	7.119		
	Total	557.959	43			

a. Dependent Variable: Suicide

b. Predictors: (Constant), Unemployment, SunnyDays, Divorce, Poverty, HealthIns

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.825	3.446		1.400	.170
	Divorce	2.362	.515	.596	4.584	.000
	SunnyDays	.022	.051	.056	.427	.672
	HealthIns	.171	.148	.182	1.152	.257
	Poverty	-.075	.163	-.063	-.463	.646
	Unemployment	-.396	.188	-.251	-2.104	.042

a. Dependent Variable: Suicide

Casewise Diagnostics[a]

Case Number	Std. Residual	Suicide	Predicted Value	Residual
20	2.252	19.7	13.691	6.0085

a. Dependent Variable: Suicide

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	7.507	19.056	12.795	2.5855	44
Residual	-4.8481	6.0085	.0000	2.5082	44
Std. Predicted Value	-2.046	2.421	.000	1.000	44
Std. Residual	-1.817	2.252	.000	.940	44

a. Dependent Variable: Suicide

Sample 42 Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Unemployment, SunnyDays, Poverty, Divorce, HealthIns[b]	.	Enter

a. Dependent Variable: Suicide

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778[a]	.605	.550	2.2314

a. Predictors: (Constant), Unemployment, SunnyDays, Poverty, Divorce, HealthIns

b. Dependent Variable: Suicide

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	274.393	5	54.879	11.022	.000[b]
	Residual	179.248	36	4.979		
	Total	453.641	41			

a. Dependent Variable: Suicide

b. Predictors: (Constant), Unemployment, Sunny Days, Poverty, Divorce, HealthIns

Coefficients (Alaska and Montana Outliers Removed)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.609	3.225		-.189	.851		
	Divorce	2.327	.433	.648	5.370	.000	.753	1.327
	SunnyDays	.122	.051	.324	2.375	.023	.589	1.698
	HealthIns	-.093	.143	-.107	-.649	.520	.401	2.493
	Poverty	.063	.146	.057	.430	.670	.628	1.592
	Unemployment	-.254	.161	-.176	-1.575	.124	.877	1.140

a. Dependent Variable: Suicide

Collinearity Diagnostics (Alaska and Montana Outliers Removed)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Divorce	SunnyDays	HealthIns	Poverty	Unemployment
1	1	5.833	1.000	.00	.00	.00	.00	.00	.00
	2	.063	9.656	.00	.06	.01	.08	.00	.57
	3	.039	12.270	.04	.23	.03	.15	.29	.01
	4	.034	13.156	.05	.69	.10	.00	.00	.06
	5	.026	15.016	.03	.01	.00	.38	.56	.22
	6	.006	31.195	.88	.01	.85	.39	.14	.15

a. Dependent Variable: Suicide

Casewise Diagnostics[a]

Case Number	Std. Residual	Suicide	Predicted Value	Residual
3	-2.102	13.3	17.990	-4.6901
42	2.241	21.7	16.700	5.0000

a. Dependent Variable: Suicide

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	8.337	19.457	12.460	2.5870	42
Std. Predicted Value	-1.594	2.705	.000	1.000	42
Standard Error of Predicted Value	.410	1.526	.810	.238	42
Adjusted Predicted Value	8.409	19.419	12.448	2.6242	42
Residual	-4.6901	5.0000	.0000	2.0909	42
Std. Residual	-2.102	2.241	.000	.937	42
Stud. Residual	-2.327	2.458	.002	1.020	42
Deleted Residual	-5.7477	6.0182	.0114	2.4832	42
Stud. Deleted Residual	-2.489	2.657	.006	1.051	42
Mahal. Distance	.408	18.206	4.881	3.672	42
Cook's Distance	.000	.205	.032	.050	42
Centered Leverage Value	.010	.444	.119	.090	42

a. Dependent Variable: Suicide