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### A Statistical Review of the U.S. Abortion Policy Since the Ruling of Roe v. Wade

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# **A Statistical Review of the U.S. Abortion Policy Since the Ruling of Roe v. Wade**

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# Background

## State of Abortion Laws Globally

While abortion is still restricted in many countries around the world, women's human rights activists and organizers have spurred a few key wins



Previously one of the few countries in the world with a total ban on abortion, a newly-passed bill decriminalizes abortion in the case of rape, if the woman's life is at risk, or if the fetus isn't viable.

Thousands of Irish citizens mobilized, even returning from abroad, successfully voting to Repeal Article 8, which enshrined a near-total ban on abortion in the country's Constitution.

Hundreds of thousands of supporters of abortion rights flooded the streets of Buenos Aires in support of a law that would legalize abortion. Though the law ultimately failed in the Senate, it passed in Congress—an unprecedented achievement—and demonstrated that the public tide has turned in support of abortion rights.

# Background

## Abortion Policy in the United States Since the Ruling of Roe v. Wade

Nearly 1 in 4 women in the United States will have had an abortion by the time she is 45 years old.

Roe v. Wade is the lynchpin U.S. Supreme Court decision supporting women's right to abortion. After it was issued in 1973:



### Enacted Restrictive Laws in States

Many states enacted new laws restricting abortions or requiring counseling, ultrasounds, and other procedures prior to being able to access an abortion.



### Blocked Federal Funding

In 1976 the Hyde Amendment was passed, blocking federal funding for abortions through Medicaid.



### Consequences for Impoverished Women

These limitations made abortion even less accessible for low-income women, who are predominantly women of color.

**Anti-choice activists have worked to overturn the decision for decades.**

# Background

## What if Abortion Laws are Restricted?



More restrictive laws are associated with unsafe abortions



Over half of all unsafe abortions globally occur in Asia



75% of abortions that occur in Africa and Latin America are unsafe



The risk of dying from an unsafe abortion is highest in Africa



**There is no definitive evidence that restrictive abortion laws are effective at reducing the number of abortions, but we do know:**

There are nearly **25 MILLION** unsafe abortions globally every year—almost 45% of all total abortions.

Every year, between **2,000,000 AND 7,000,000 WOMEN** will survive unsafe abortion but will suffer long-term damage or disease as a result of the procedure, such as injury to internal organs or sepsis.

An estimated **47,000 WOMEN DIE** every year as a result of unsafe abortion, making it one of the leading causes of maternal mortality.



# Purpose

Evidenced by several attempt of various scholars studying the U.S. abortion policy at discrete moments in time, coming to **conflicting conclusions about how well theories of morality policy, gender, and political representation explain abortion policy.**

Hence, this study examines the **relationship between the level of support for abortion policy in the U.S.** and some factors namely; Gender, Religious background, and Political ideology, as well as the **difference in abortion rates among U.S. states that are governed by republican or democratic governors of all 50 U.S. states.**

# Methodology

- Quantitative & Qualitative Study
- Primary and Secondary data collection
- Chi-square & unpaired T-test hypothesis testing
- NRLC (National Right to Life Convention) Abortion Statistics as at 2019



## ABORTION statistics United States Data and Trends

### Abortion Drop Continues

- There are two basic sources on abortion incidence in the United States:
- The U.S. Centers for Disease Control (CDC) publishes yearly, but relies on voluntary reports from state health departments (and New York City, Washington, D.C.). It has been missing data from California, New Hampshire, and at least one other state since 1990.
  - The Guttmacher Institute (GI) contacts abortion clinics directly for data but does not survey every year.
  - Because it surveys clinics directly and includes data from all 50 states, most researchers believe Guttmacher's numbers to be more reliable, though Guttmacher still believes it may miss some abortions.
- Both the CDC and Guttmacher show significant recent drops and sustained declines over the last 25 years.
- Total abortions dropped 27.8% from 1990 to 2016 with the CDC, and fell 46.4% from 1990 to 2017 with GI.
  - Total abortions fell below 1 million for the first time in the 2013 GI count and have continued downward to 662,320 in the most recent GI figures for 2017.
  - The abortion rate for 2017 for GI was 13.5 abortions for every 1,000 women of reproductive age (15-44), less than half what it was in 1981 (23.3) and even lower than when abortion was legalized in the U.S. in 1973 (18.3).
  - Guttmacher says there were 18.3 abortions for every 100 pregnancies ending in live birth or abortion in 2016, 18.4 for 2017, lower abortion ratios than any since 1972.
  - Guttmacher says that the number of abortion "providers" has dropped from a high of 2,916 in 1992 to 1,587 in 2017.
  - Most of the reduction in abortions soon between 2008 and 2017 occurred in facilities performing a thousand or more abortions a year. A loss of 122 such facilities from 2008 to 2017 was accompanied by a decline of 346,200 abortions, virtually all of the drop between those years.
  - The percentage performed with chemical abortifacients like mifepristone rose from 18.4% in 2008 to 39.4% in 2017.

### The Consequences of *Roe v. Wade*

**61,628,584**  
Total abortions since 1973

# Methodology

- Sample & Data Collection

- Primary data collected for this research project was from survey questions administered to 100 students randomly picked from the population of East Tennessee State University. Data was analyzed using chi-square test.
- Comparison groups comprised of democrat governed states and republican governed states in the U.S. for the year 2015 totaling fifty states and the District of Columbia sourced from [Johnstonsarchive](#). Data was analyzed using un-paired T-test.
- A trend analyzes of the time series data was collected for annual abortions in the U.S. sourced from [NRLC Abortion Statistics](#) for each year during 1973–2015.
- Lastly, qualitative secondary data were also collected from the historical cases associated with abortion policy with Roe v. Wade since 1973.



# Methodology

- Operationalization of Variables

<b>Dependent Variable</b>	<b>Operational Measure</b>
Support for Abortion	A dichotomous indicator coded 1 for Pro-choice (Yes), coded 0 for Pro-life (No) to explain students' views on women's right to abortion
Abortion Rate	Secondary data for reported annual abortion in the U.S. from the year 1973 to 2015 sourced from <a href="#">NRLC Abortion Statistics</a> . Data for abortion rates across U.S. states for 2015 was sourced from <a href="#">Johnstonsarchive</a> .
<b>Independent Variables</b>	<b>Operational Measures</b>
Gender	A dichotomous indicator coded 1 for Female, coded 0 for Male.
Religious Background	A dichotomous indicator coded 1 for religious, coded 0 for non-religious.
Political Ideology	A dichotomous indicator coded 1 for students who identified as Democrats, coded 0 for students who identified as Republican.
Governors	A dichotomous indicator coded 1 for Democrat governed states, coded 0 for Republican governed states. State governors sourced from <a href="#">Wikipedia</a>

# Results and Discussion: Gender

- **H<sub>0</sub>**: There is no relationship between gender and views on abortion policy among U.S. university students.
- **H<sub>a</sub>**: There is a relationship between gender and views on abortion policy among U.S. university students.
- At a significant value of 0.05, Chi-Square test corresponding p-value (0.912) is greater than  $\alpha$  (0.05), we fail to reject our null hypothesis.
- In a sum, we conclude that no association was found between gender and views on abortion policy.

Chi-Square Tests - Gender

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.012 <sup>a</sup>	1	.912		
Continuity Correction <sup>b</sup>	.000	1	1.000		
Likelihood Ratio	.012	1	.912		
Fisher's Exact Test				1.000	.538
Linear-by-Linear Association	.012	1	.913		
N of Valid Cases	100				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 19.27.

b. Computed only for a 2x2 table

# Results and Discussion: Religious Background

- **H<sub>0</sub>**: There is no relationship between religious background and views on abortion policy among U.S. university students.
- **H<sub>a</sub>**: There is a relationship between religious background and views on abortion policy among U.S. university students.
- At a significant value of 0.05, Chi-Square test corresponding p-value (0.491) is greater than  $\alpha$  (0.05), we fail to reject our null hypothesis
- In a sum, we conclude that no association was found between religious background and views on abortion policy.

Chi-Square Tests - Religious Background

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.474 <sup>a</sup>	1	.491		
Continuity Correction <sup>b</sup>	.213	1	.644		
Likelihood Ratio	.471	1	.493		
Fisher's Exact Test				.506	.321
Linear-by-Linear Association	.469	1	.493		
N of Valid Cases	100				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.48.

b. Computed only for a 2x2 table

# Results and Discussion: Political Ideology

- **H0:** There is no relationship between political ideology and views on abortion policy among U.S. university students.
- **Ha:** There is a relationship between political ideology and views on abortion policy among U.S. university students.
- At a significant value of 0.05, Chi-Square test corresponding p-value (0.402) is greater than  $\alpha$  (0.05), we fail to reject our null hypothesis
- In a sum, we conclude that no association was found between political ideology and views on abortion policy.

Chi-Square Tests - Political Ideology

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.702 <sup>a</sup>	1	.402		
Continuity Correction <sup>b</sup>	.396	1	.529		
Likelihood Ratio	.700	1	.403		
Fisher's Exact Test				.414	.264
Linear-by-Linear Association	.695	1	.404		
N of Valid Cases	100				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 15.99.

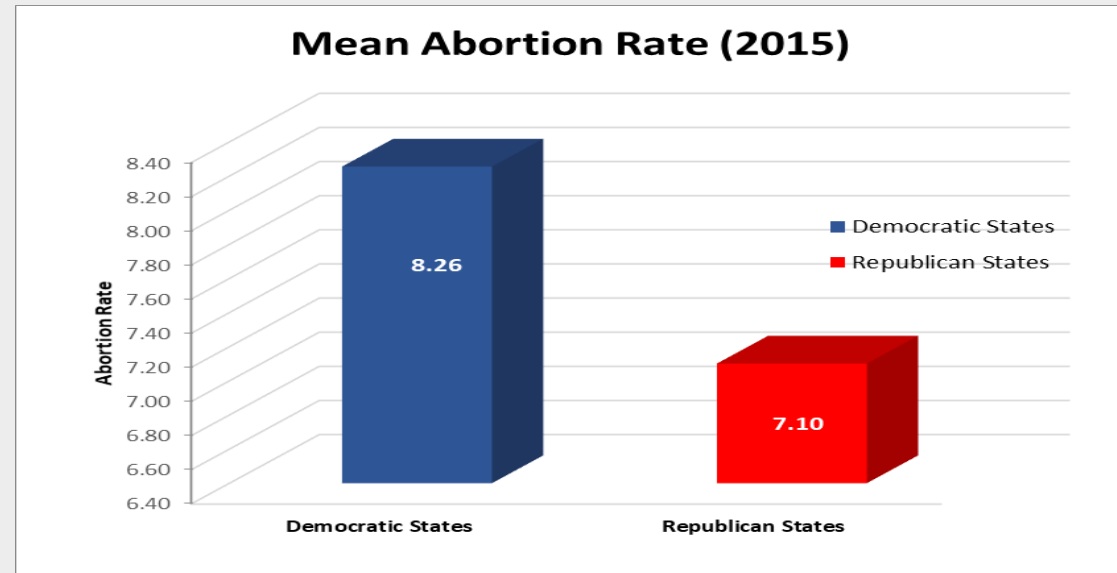
b. Computed only for a 2x2 table

# Results and Discussion: States Governors

- **H0:** There is no significant difference in abortion rates among U.S. states that are governed by republican or democratic governors.
- **Ha:** There is a significant difference in abortion rates among U.S. states that are governed by republican or democratic governors.
- At 95% confidence interval, the P-value is 0.449 and the t-test is 0.767, hence we fail to reject our null hypothesis
- This provides support for the initial conclusion of no significant difference in the means of abortion rates among U.S. states that are governed by republican or democratic governors.

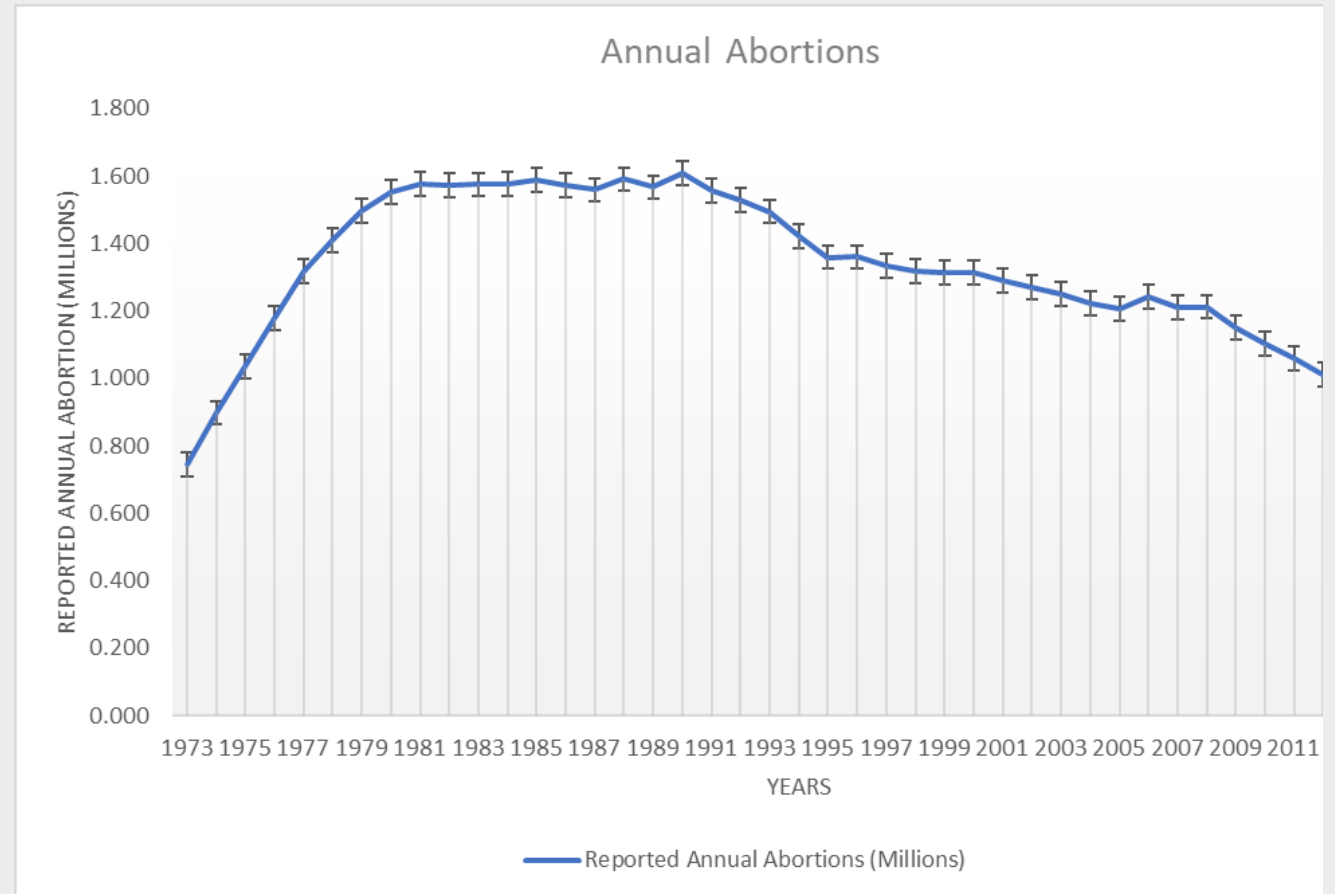
**Independent Samples Test**

		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
Abortion_Rate	Equal variances assumed	.898	.348	.830	48	.411	1.15430	1.39044	-1.64137	3.94996
	Equal variances not assumed			.767	29.346	.449	1.15430	1.50515	-1.92250	4.23110



# Results and Discussion: Trend Analysis

- The line graph illustrates the trend of annual abortion in the United States since the ruling of Roe v. Wade over the years from 1973 to the year 2015.
- Peak in 1990 with abortion totaling 1.61million in that year.
- Constant decline in the U.S. annual abortion rate even though abortion has been legalized in the U.S. states.



# Conclusion

- Analysis results suggest that there is no association between our independent variables: gender, religious background, political ideology and views on abortion policy.
- Also, party affiliation of the governor of a state does not necessarily affect the abortion rate of that state.
- Legalizing abortion in the U.S. states does not increase the rate of abortion.
- In summary, gender, religious background, political ideology or affiliation, nor legalization of abortion does not have an effect on the rate of abortion in the U.S.

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QUESTIONS?