

Activated Knowledge/Ignorance or Inert Information?-the case of abortion

A constant debate in the United States, particularly one that separates liberals and conservatives, is the debate regarding access to abortion. This is an intensely emotional issue. On a personal level, I feel strongly about it, though I would not consider myself informed. I imagine that this is true for many people, particularly given the moral tones of the debate. My immediate position on abortion is that it should be permitted due to questions of individual agency. I believe that a woman should be able to control what happens to her body as well as her own future. Because this issue has enormous emotional weight combined with the fact that as a woman myself I value my individual freedom, I imagine critical thinking will be difficult. I will likely tend toward the emotional thinking of System 1. In order to develop a more nuanced, informed opinion, I will nonetheless attempt to use the strategies of critical thinking to overcome my emotional response and think critically about this issue, considering both sides of the debate.

I began by googling “abortion access in the United States.” I figured this term would generally capture opinions for or against abortion. I chose this over something like “arguments for/against abortion” as I hoped the less direct phrasing might give me more nuanced results. The phrase gave me a variety of sources discussing abortion. I wanted to avoid sources I know to be biased, in other words avoid sources strongly associated with liberals, conservatives, or a particular interest group. As I was just beginning the research, however, I was less discriminate and more interested in skimming a variety of articles to see the type of arguments out there.

The first article I clicked on was from *NBC News*, titled “Abortion in the U.S.: Five Key Facts.”¹⁴ While at first I was hesitant to click on it due to concerns over bias, I hoped that the article’s self-proclaimed factual focus made it a good starting point. The first fact in the article was that most Americans support abortion rights, showcasing the pro-choice bias. It cited the *Kaiser Family Foundation* poll which found that 67% of Americans supported *Roe v. Wade*, the 1973 Supreme Court ruling that affirmed the right to an abortion. It proceeded to cite another poll, this one from both *NBC News* and the *Wallstreet Journal*, which found that 54% of Americans support legal abortions, while 70% of Americans support *Roe v. Wade*. Seeing the difference in scores between legality versus the court case, I made a note to explore the case *Roe v. Wade* in greater depth. I also noted that the article heavily cited the *Guttmacher Institute*, which provided several statistics that seemed to support abortion access. I thus made a note to verify these statistics as well as determine the credibility of the institute itself.

First, I explored *Roe v. Wade* in greater depth, beginning by searching “roe v. wade, significance.” Most of the articles Google suggested seemed fairly partial. I thus decided to use a historical source, as I hoped the longer lens of history would help me understand the case’s significance with less bias. I chose *ushistory.org*, which is funded by the *Independence Hall Association*. While I’m weary of patriotic sounding organizations (in my experience patriotic names are politically often a cover for an interest group), I quickly googled them and found that their mission is to promote American history. I concluded that they are reliable. They explained that prior to *Roe v. Wade*, there were no federal laws on abortion. Many states chose to ban abortion entirely, with the exception when a woman’s life was in danger. Eventually, a woman going by the name Jane Roe anonymously challenged the Texan laws banning abortion. The Supreme Court invalidated the law 7-2, arguing that the right to privacy was implied in the ninth and the 14th Amendments to the U.S. Constitution. The court’s decision meant that a state could not restrict abortion access in the first three months of the pregnancy. Given its significance for state laws on abortion, this ruling became incredibly contentious.¹⁵

As I continued exploring *Roe v. Wade*, I found it difficult to find sources discussing the ruling that were not obviously partial to one side or the other. I began to wonder if the moral dimension of *Roe v. Wade* meant that it would not be possible to find authors who did not hold an opinion on the issue. I thus decided to read an article

¹⁴Fox, Maggie. “Abortion in the U.S.: Five Key Facts,” *NBC News*, (July 5, 2018). <https://www.nbcnews.com/health/health-news/abortion-u-s-five-key-facts-n889111>

¹⁵ Ushistory.org, “57d. *Roe v. Wade* and Its Impact,” *U.S. History Online Textbook*, <http://www.ushistory.org/us/57d.asp> (2018), accessed December 17, 2018.

from the *Washington Post*, which I associate with a liberal bias, but felt was trustworthy given that it was written by a law professor. The professor argued that the *Roe v. Wade* decision was not meant to be about abortion but truly about privacy. The right to privacy was ruled expansive enough that it encompassed control over one's body, decisions, and life. The claim of privacy to assert a certain amount of autonomy then turned *Roe v. Wade* into the rallying cry for a variety of issues unrelated to abortion. The professor notes that these other movements faded, while the abortion question remained. In fact, she argues that there was a strategic dimension in tying *Roe v. Wade* to abortion, as this would be easier to overturn had the case been seen through the less controversial lens of privacy.¹⁶ Her paper showed the extent to which the meaning of a legal decision materializes in a political space.

Next, I returned to the question regarding the legitimacy of the *Guttmacher Institute*. As I was skimming articles, their work was cited again and again to argue for greater access to abortions. The institute described itself as a research and policy organization that advances sexual and reproductive health and rights.¹⁷ The emphasis on policy with a clear goal revealed what bias might affect their work. I still wondered about the accuracy of their data. On this question I felt reassured by their publications in peer reviewed journals, and by their partnerships with Columbia University, Johns Hopkins Bloomberg School of Public Health, London School of Hygiene and Tropical Medicine, the United Nations Population Fund and the World Health Organization.¹⁸ The credibility of these institutions made me feel more comfortable trusting the data from the *Guttmacher Institute*. A website called *Media Bias/Fact Check* gave them a high rating for factual accuracy, though noted that they have a slight liberal bias, shown in their "loaded words" that attempt to influence the audience.¹⁹ Media bias was thus referring to the effectiveness of **rhetoric** to change how people perceive an issue. Vaughn points out that using rhetoric in this fashion weakens critical thinking, as it attempt to persuade the reader not on the basis of logic and reason, but rather through the artful, emotion-laden language.²⁰ Nonetheless, I decided that the factual content of their work itself was fairly trustworthy.

¹⁶ Ziegler, Mary "When *Roe v. Wade* meant more than just abortion rights," *Washington Post*, (January 22, 2018).

https://www.washingtonpost.com/news/made-by-history/wp/2018/01/22/when-roe-v-wade-meant-more-than-just-abortion-rights/?utm_term=.702a2c480580

¹⁷ "About Us," *Guttmacher Institute*, <https://www.guttmacher.org/about>, Accessed December 16, 2018

¹⁸ "Partnerships and Collaborations," *Guttmacher Institute*, <https://www.guttmacher.org/about/partnerships-collaborations>, Accessed December 16, 2018

¹⁹ "Alan Guttmacher Institute: Left-Center Bias" *Media Bias/Fact Check*, <https://mediabiasfactcheck.com/alan-guttmacher-institute/>, accessed December 17, 2018.

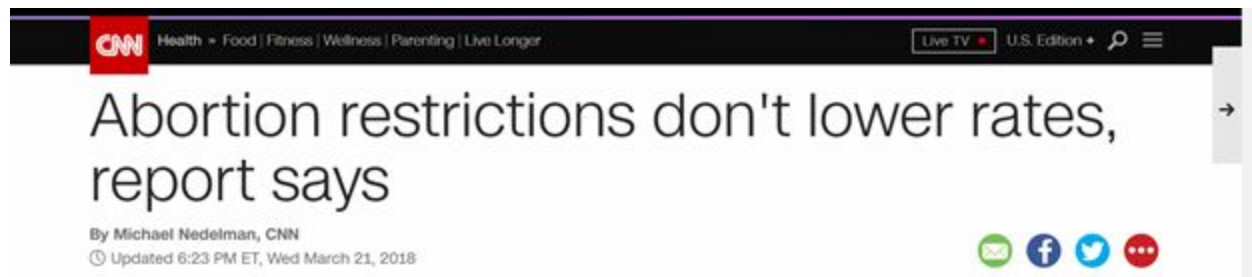
²⁰ Vaughn, "Fallacies and Persuaders," pg. 156

I thus returned to the original comment by *NBC News*, which claimed that countries that restrict abortions have the highest abortion rates. The excerpt is shown below:

“Countries that restrict abortion the most have the highest rates of abortion, the Guttmacher Institute found. “The abortion rate is 37 per 1,000 women in countries that prohibit abortion altogether or allow it only to save a woman’s life, and 34 per 1,000 in countries that allow abortion without restriction as to reason — a difference that is not significant.” Guttmacher said in a report issued in March.”

While the article honestly cited the complete quote, the author nonetheless made a fallacious argument, by using what Vaughn calls an **“irrelevant premise.”** An irrelevant premise has no bearing on the truth of a conclusion, in this case because the evidence is too weak.²¹ Here the *Guttmacher Institute* concluded that the statistical difference between countries restricting abortion and those that do not is too small to be significant, and thus does not support her claim.

In fact, Nedelmann writing for *CNN* used the same statistic to argue against abortion restrictions, with a dramatic title claiming that abortion restrictions do not lower the rates of abortion.²²



The title is misleading, as the report does not directly say that “abortion restrictions don’t lower rates.” The report merely observes that the rate of abortion is roughly the same in countries where it is most restrictive and least restrictive. This *suggests* that abortion restrictions do not lower rates, but this is not the only possible explanation. Nedelman’s argument is thus **inductively forceful**, though it is not **deductively valid**. This means that the truth of the premise (here the similar rates of abortion) does not ensure the truth

²¹ Vaughn, “Fallacies and Persuaders,” pg. 156

²² Michael Nedelman, “Abortion Restrictions Don’t Lower Rates,” *CNN*, (March 21, 2018), <https://www.cnn.com/2018/03/21/health/abortion-restriction-laws/index.html>

of the conclusion (that abortion restrictions do not lower rates), but the premise provides good reason to expect that the conclusion is true as opposed to false.²³

The presence of **intervening variables** prevents us from simply accepting the conclusion that restrictions on abortions have no effect. Still curious about the effect of abortion restrictions, I continued googling this question. I chose an article from the *Charlotte Lozier Institute* dedicated to the question. The *Lozier Institute* is clearly pro-life, with a self-professed mission to promote “the value of human life, motherhood, and fatherhood.”²⁴ Meanwhile the article’s author, Michael New, wrote past articles like “Big Abortion Needs Big Government: The Case for Defunding Planned Parenthood.” He clearly aligns with the pro-life position. But given his position as a postdoctoral fellow at the Harvard-MIT data center as well as his Master’s Degree in Statistics from Stanford, he seemed like a reliable sources.²⁵

New criticized the statistics from the *Guttmacher Institute* in a few ways. First he points out that according to *Guttmacher*, only seven developed countries have significant restrictions on abortions, while 94 developing countries do. Since most of the countries that restrict abortion access are in Latin America, the Middle East, Africa, which have “higher poverty rates and cannot be compared to the industrialized democracies of North America and Europe.” In addition to poverty, he argues that the authors also should have considered economic growth, demographic shifts, or any other “countervailing factors that affect the incidence of abortion.” I agree with his skepticism regarding intervening variables, something about his criticism also made me skeptical.

Since much of the debate surrounding the incidence of abortion regarded this statistic, I finally took the time to find the original report. I suspected that the other reports had just read the executive summary, and decided I would read the original report to get the complete picture. However, I was frustrated to find that the report did not explain its methodology regarding the creation of these statistics directly, but rather cited four other academic studies in footnotes from which it derived its methods.²⁶ I assumed this was due to the multitude and complexity of methods the report used, as it recognized having to use various strategies to estimate missing statistics to determine each country’s abortion rates. Estimating abortion rates is difficult, because even when

²³ Tracy Howell and Gary Kemp, “Chapter 4: Logic: Probability and Inductive Reasoning,” in *Critical Thinking: A Concise Guide*, (4th edition, 2015), pg. 105

²⁴ “About Us,” *Charlotte Lozier Institute*, <https://lozierinstitute.org/about/>, Accessed December 17, 2018

²⁵ “Michael J. New, Ph.D.” *Charlotte Lozier Institute*, <https://lozierinstitute.org/team-member/michael-j-new/>, Accessed December 17, 2018

²⁶ Susheela Singh, Lisa Remez, Gilda Sedgh, et al., “Abortion Worldwide 2017: Uneven Progress and Unequal Access,” *Guttmacher Institute*, (March 2018), pg. 8, 56

abortion is legal, women are hesitant to report it. Given these limitations, at this point I decided to move on from analyzing the *Guttmacher Institute's* methodology, as I personally do not consider myself qualified to judge the research methods proposed by these four studies nor did I consider it worth the effort to trace its implementation on every country in the study.

The experience trying to uncover the truth behind this statistic exemplified the many obstacles to discerning the truthfulness of a piece of information today. For one, journalists easily misinterpret statistics to create arguments that are misleading or merely inductively forceful, not deductively valid. The experience also showed how difficult it is to determine the quality of a statistic, given the possibility of statistical error. New's attack rested on criticizing the countries as incomparable as well as pointing to the prevalence of intervening variables. In my attempt to find the truth, I eventually gave up because it was taking up too much time. Limited time hinders critical thinking, as it forces us to trust executive summaries, news articles, and other authorities to distill the most important information.

I continued my research in this style. I would read articles carefully to see whether the statistics supported the claim the author is making. I would make note of frequent terms or sources to explore those with greater depth as well as verify their credibility. Since abortion access is such a heated debate, I expected some bias in every source. I did not discredit sources entirely on the basis of the author's own opinion, but read the sources with suspicion in the expectation that some of the argumentation will be flawed. In this way, I tried to escape the intuitive thinking of System 1 and use a more questioning, focused line of thought associated with System 2. I continued to follow topics that peaked my interest and would verify them with other sources.

As I researched, I kept on finding more pro-choice sources than pro-life sources. I realized that the language I was using in my searches tended to favor the pro-choice side. I blamed this on my person bias. I grew up in a predominantly liberal Californian community and thus this was the language I was raised to intuitively use. While I expected it to be frustrating, I finally decided I needed to read some hardcore pro-life sources.

I began with "abortion harms." Since every source seemed to argue pro-life views, I simply chose the first one from the *Nebraska Family Alliance*.²⁷ After a factual

²⁷ "Issue Analysis," *Nebraska Family Alliance*, <https://nebraskafamilyalliance.org/policy/life/abortion-harms-women/>, Accessed December 17, 2018

introduction regarding *Roe v. Wade*, it ended with the dramatic statement, “abortion harms women.” I wanted to read the article with an open mind, but my own views regarding abortion made me all too eager to start picking out the flaws in the arguments on the page. Just like the *NBC* and *CNN* articles, its claims were overstated. It confused causation and correlation by implying that a 2011 article in the *British Journal of Psychiatry* found that abortion increased the likelihood of mental health risks, marijuana use, suicidal behavior, and suicide.²⁸ The nature of the statistics seems to point to correlation, not causation, meaning that the abortion is not responsible for these issues. This is especially likely, given that abortion is more likely among people in poverty, who were also more likely to be exposed to various stress factors.

Next *The Nebraska Family Alliance* attacked the study responsible for the claim that an abortion is safer than carrying a pregnancy to term. They first argue against comparing the very accurate number of reported deaths at pregnancy to the very inaccurate number of deaths associated by abortion. I find this a valid point, depending on the discrepancy between the two rates: if the discrepancy is small, we may wonder about gaps in the reporting; if it is large, the slight differences in reporting would be incomparable to the change between carrying to term and an abortion. Then they make an argument based on the **ad-hominem fallacy**, arguing that the researcher behind the study, Dr. David Grimes, is a pro-abortion activist and thus should not be trusted. They argue that the speculative nature of the data gives him too much power to interpret it.

The rest of the article continues by listing ways abortion harms women. Some of the ways include doubling the risk of alcoholism, causing depression and difficulty bonding with subsequent children, losing interpersonal bonds that lead to divorce, drug abuse, post-abortive syndrome which includes anxiety attacks, irritability, outbursts of rage, sleep difficulties, etc., death, breast cancer, ectopic pregnancy, placenta Previa, uterine perforation, stillbirth, premature delivery, low birth weight, and miscarriage. Given their misuse of a study in the beginning, I found myself skeptical of the accuracy of these claims. I imagined some of these complications to be true, but wondered if their frequency might be exaggerated or whether the causal relationship firmly established. If it was not for the fact that I hold pro-choice beliefs, I might have easily accepted these arguments. But since they counter my worldview, I found myself resistant to them.

It did not seem feasible to double-check every footnote the article used to make its claims, I decided to follow one claim which suggested that oral contraceptive increase the risk of breast cancer. Again I found myself at the limits of my

²⁸ *Nebraska Family Alliance*, <https://nebraskafamilyalliance.org/policy/life/abortion-harms-women/>

comprehension. The original article was from the *Journal of Cancer, Epidemiology, Biomarkers, and Prevention* and analyzed triple-negative breast cancer, a particularly vicious subtype. The article explained that oral contraceptive use of one year or greater was associated with a 2.5 fold increased risk for triple-negative breast cancer and no significantly increased risk of non-triple-negative breast cancer.²⁹ While the *Nebraska Family Alliance* did not specify which type of cancer, I wondered if such simplifications were necessary enough to be considered acceptable in journalism. I wanted to explore to what extent the facts were overstated, and thus began searching the different types of cancers. A quick search revealed that 10-20% of diagnosed breast cancers are triple-negative, which means they do not have the three receptors normally associated with breast cancer.³⁰ This aggressive form of breast cancer is rare. I wondered if this means one already has a low risk, and whether a 2.5 fold increased risk is significant.

By the end of my research, I felt frustrated. It seemed as though both the pro-choice and the pro-life side liked to attack each other's statistics. While the pro-choice took the position that legal abortions protects women, particularly from unsafe illegal abortions, the pro-life generally described abortions as harmful in themselves. It seemed to me as though the issue is so politicized, that the debate is full of questionable arguments. The experience also showed the limits of critical thinking. With the growing complexity of issues, it was not feasible for me to evaluate the methodology and the extent of every claim made in the original scientific studies. I found myself constantly in circles, trying to verify information until I finally gave up. If I had to go through the research process again, I would be more strategic regarding which information I follow as my initial determination to find the truth gave way to a more frustrated acceptance of the limits of my knowledge.

I began the abortion debate with inert information, as I associated with the pro-choice movement and more easily adopted their positions. Ideally the research process would have given me activated knowledge. To an extent I am more informed about the many factors affecting abortion laws and their construction in the real world. Yet I am also left with many questions and feel as though true activated knowledge on the issue requires for legal and medical expertise.

²⁹ Jessica M. Dolle, Janet R. Daling, Emily White, Louise A. Brinton, David R. Doody, Peggy L. Porter and Kathleen E. Malone, "Risk Factors for Triple-Negative Breast Cancer in Women Under the Age of 45 Years," *Cancer Epidemiol Biomarkers Prev* (April 1 2009), 18) (4) 1157-1166; DOI: 10.1158/1055-9965.EPI-08-1005

³⁰ "Triple Negative Breast Cancer," *National Breast Cancer Foundation*, <https://www.nationalbreastcancer.org/triple-negative-breast-cancer>, Accessed December 18, 2019