

# ***Roe Vs. Wade: United States Media's Reconstruction of Female Abortion Rights Through Leading Questions***

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**Abstract:** The recent overturn of Roe vs. Wade received immense coverage in the United States media, revealing the existence of interviewer bias, specifically leading questions impacting public opinions toward female abortion rights. The present study utilizes volunteer sampling and contains United States female participants (N=100) between the age of 18-45. Half of the participants completed a five-question survey with diction choices biased against abortion, and the other half completed the survey with common media diction, which favors abortion. The results indicate that participants who completed the against-abortion survey on average had a higher number of responses that favored anti-abortion opinions. However, more research is required to better understand the extent to which biased wording can impact public opinion.

**Keywords:** media, leading questions, interview bias, female abortion rights, Roe vs. Wade

## **1. Introduction**

Leading questions suggest the desired response when asked by the interviewer. The framing of the question through diction choice can influence the answer when collecting public opinions. Although leading questions should be avoided during eyewitness testimonies and interviews, interviewers often use them to collect biased responses [1]. A recent event in which leading questions influenced public opinion was the Roe vs. Wade lawsuit. The lawsuit began in 1973 when Jane Roe filed a lawsuit against the abortion laws in Texas. The case ended with the supreme court ruling in favor of Roe, deciding that women own the constitutional right to abortion [2]. However, on June 24, 2022, the US supreme court overturned the lawsuit, and the US media published immense coverage of the overturn. Following the immense coverage in the press, social psychologists and journalists began to notice a pattern in the interviewer's interviewing techniques [3]. Depending on the framing of the questions, women's opinions toward reproductive rights differed. For example, when interviewers asked open-ended questions regarding important issues that mattered to women, few mentioned reproductive rights. However, when specifically asked about their feeling toward "Roe being repealed", even many pro-lifers commented on the "government's overreach and attempt to regulate their bodies" [4]. There is a significant effect of diction choice and framing in leading questions which influences women's opinion toward the overturn of Roe vs. Wade. The present study will manipulate the diction choices in common questions used to interview women regarding the overturn of Roe vs. Wade. Then the responses to the online questionnaires will be analyzed to compare the means of responses that support the overturn of the case in the experimental and control condition. Lastly, the article will

evaluate the significance of the data and its implications. The study holds significant implications in the digital age as it reveals the role of interviewer bias when collecting public opinion. Specifically, when surveying and interviewing populations regarding controversial topics, the usage of biased diction and framed questions can lead to an inaccurate portrayal of public opinion and is undesirable for informing the public.

## 2. Literature Review

Previous research investigating the role of leading questions in collecting public opinions in the *Roe vs. Wade* lawsuit was published by Los Angeles Times. The article suggests Washington Post's coverage of the story is biased towards abortion rights as the Post discusses *Roe vs. Wade* as a decision made on "a woman's reproductive rights" rather than a decision on the rights of the fetus [5]. Similarly, Los Angeles Times referred to the overturn of the lawsuit as "the nation's harshest," whereas those opposing abortion referred to the legislation as "benevolent toward the fetus" [6]. Many media refer to the anti-abortion legislation as "restrictive" whereas the opposing party refers to it as "protective" towards the fetus [7]. Furthermore, in 1972, Loftus and Palmer investigated the effect of leading questions asked of eyewitnesses after an event on the memory recall of that event. The researchers predicted that participants' memories would be reconstructed due to the presence of leading questions. The study included 45 American university students in five different groups. All of them were shown seven videos of car accidents and then after each film, researchers asked them to write a short summary. Following the writing, participants had to answer a leading question: 'About how fast were the cars going when they hit each other?' The verb "hit" in the question was then replaced with either "contacted", "bumped", "collided" or "smashed" for each of the other four groups. The results showed that the intensity of the verbs included in the sentence influenced participants' estimation of the car speed. For example, the verb "smashed", with the highest intensity, generated a mean estimation of 40.5 mph. In contrast, the verb "contacted", with the lowest intensity, estimated a mean speed of 31.8 mph. The speed estimation increased as the intensity of the verbs increased in each of the conditions. Loftus and Palmer noticed that external information, whether explicit or implicit, can impact individuals' memories and interpretations of events [8]. Hence, as an extension of the Loftus and Palmer study, the present research investigates whether the study applies to public opinions toward contemporary social policies.

## 3. Methodology

### 3.1. Research Goal

The replication justification is demonstrated through the prevalence of leading questions in collecting opinions toward public policies. It is essential to explore the influence of diction choice on females' opinions on anti-abortion legislation. The experiment in this research is a conceptual replication of the publication of the Los Angeles Times and the study conducted by Loftus and Palmer. The previous research is modified by taking the same research question but using an online survey to explore the effect of leading questions on public opinion. The aim is to investigate the effect of leading questions on opinions regarding anti-abortion legislation.

### 3.2. Variable and Hypothesis

The independent variable is a diction choice in leading questions, which can be operated by changing the words commonly used in the media, such as anti-abortion vs pro-life. The dependent variable is the female public opinion, which can be operated by measuring the number of survey responses in the five questions survey.

Null hypothesis: there is no significant difference in the responses of women of birthing age in the United States in the surveys with leading questions supporting anti-abortion policies or opposing anti-abortion policies.

Experimental one-tailed hypothesis: if women of birthing age in the United States take a survey with five leading questions supporting anti-abortion policies instead of opposing them, then more responses will be in favor of the right of fetus.

### 3.3. Research Design

The experimental design is an independent sample to explore the correlation between two variables while avoiding the participant guessing the hypothesis. The design is a single-blind study to maximize objectivity and minimize demand characteristics. The independent variable is the leading questions operated by changing the phrasing of the questions. The dependent variable is collective public opinion operated by counting the online survey responses of the participants.

The controlled variable is the number of questions included in the survey, the survey platform, and the length of the questions. The theme of the surveys was kept the same, both discussing opinions toward the overturn of Roe vs. Wade. The age, gender, and nationality of the participants were kept constant to collect responses from the population that the regulation directly affects. There are five questions, each asking the participants to choose a response that expresses their opinion toward the overturn of the Roe vs. Wade decision. The length and number of questions were kept constant to avoid participants' attention span as a confounding variable.

The sampling method is volunteer sampling because it is a fast and affordable way to collect data from the targeted population. The target population is females from the United States between 18 and 45, the common childbearing age. The participants varied in demographics, income level, and education level. There are 100 participants in total, 50 for each set of surveys. Participants volunteered to take the online survey posted on SurveyMonkey.

## 4. Result and Analysis

### 4.1. Descriptive Data

The total number of participant responses for each condition and survey is 50, with 100 participant responses in total. The mean was used to demonstrate the measure of central tendency and there is a higher mean in the experimental condition. As shown in Table 1 and Figure 1, the mean number of participant responses in favor of the overturn of Roe vs. Wade in the control and experimental condition is 18 and 21.4 out of 50, respectively. The mean can represent the whole data set by including all obtained values in the calculation. However, after running the significance test, there was no significant difference in the number of responses favoring the overturn of Roe vs. Wade answered by participants in both conditions. The standard deviation is calculated to identify the outliers and provide information on the spread of the data. The measure of dispersion obtained is 21.4 for the fetus-favoring condition and 18 for the mother-favoring or the media diction condition. The standard deviation provides insight into the data set's variability and yielded the values of 6.16 and 4.93 in the experimental and control condition respectively, illustrating the equal spread of data between the two conditions.

Table 1: Processed data table to investigate the effect of leading questions on opinions in favor of overturn of Roe vs. Wade.

	Experimental	Control
Mean	21.40	18.00
Standard Deviation	6.16	4.93

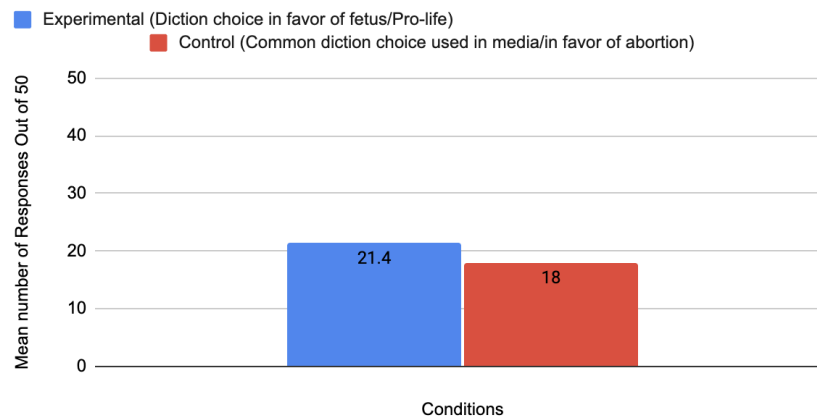


Figure 1: Graph to investigate the effect of leading questions on opinions in favor of overturn of Roe vs. Wade.

## 4.2. Inferential Data

The sample population in the current experiment is small ( $n=100$ ) and ordinal data was collected through the independent sample design. Hence, the data analysis used Independent Sample T-Test to indicate the p-value inferentially [9]. The one-tailed p-value calculated for this experiment is 0.182, far greater than the  $p \leq 0.05$  value for the data to be deemed significant. The p-value calculated suggests an 18% chance that the results of the conducted experiment are due to chance, a higher value than the expected 5% [10]. Through the calculation of the inferential, the research retained the null hypothesis. There is no significant difference in the survey responses of American female participants in the fetus-favoring or mother-favoring condition from a survey of 50 responses.

## 4.3. Evaluation

The results from the current experiment deviated from the literature review's experiment conducted by Loftus and Palmer in 1972. Both experiments resulted in leading questions influencing participants. However, Loftus and Palmer demonstrated a greater difference in the two conditions' mean, making the study conducted by Loftus and Palmer yield significant results.

The nature of leading questions indicates that the biased in favor of Roe vs. Wade overturn condition would have a higher number of responses recalled biased toward the fetus as questions are framed using particular diction choices, influencing participants to hold a different opinion. The framing of the questions biased toward the fetus's condition utilizes diction choices that imply the favoring of the overturn of Roe vs. Wade or anti-abortion. Words such as pro-life vs. pro-abortion and baby vs. child-bearer were utilized that emphasize the rights of the fetus' life. On the other hand, in the common media or the in-favor of the mother's condition, participants were exposed to diction

choices such as pro-choice vs. anti-abortion and fetus vs. mother which negatively impacted their opinion regarding the overturn of Roe vs. Wade. However, the p-value of 0.182 indicates an 18% possibility that the result is due to chance. The findings support that leading questions have some effect on altering the respondent's responses but are not significant enough to support the one-tailed experimental hypothesis. A possible explanation for the findings is due to the small sample population in the current experiment, as the small mean difference in the two conditions may be a result of the insufficient amount of data collected.

## 5. Discussion

There were multiple strengths in the design of the experiment, including the independent sample design used to control confounding variables. The design eradicates the possibility of a carryover effect in which participants' opinions will not be influenced by leading questions that favor the rights of the fetus and the mother, thus increasing data reliability. Furthermore, the design ensures that the participants are blind to the purpose of the experiment, reducing the possibility of demand characteristics. However, the independent sample design does have limitations. One limitation includes individual differences in participants, which can sometimes lead to differences in the groups' results. For example, participants in one group may have a stronger opinion than participants in the other, leading to them being less influenced by leading questions. To minimize the individual differences in participants, participants should be randomly assigned into conditions rather than self-selected. All participants should have an equal chance of being assigned to a group. The confounding individual differences will be decreased, increasing the reliability of the results collected.

Another strength of the sample participant includes the controlled age range of the participants. All participants were United States females between the age of 18 to 45. The age similarity, which is the common child-bearing age, contributes to a similar knowledge of the background information regarding the overturn of Roe vs. Wade as they are the population directly impacted by the policy. However, due to volunteer sampling, the sample population may all have similar qualities that could affect the results of the experiment. For example, participants who chose to take the surveys may already hold a strong opinion regarding the overturning of the Roe vs. Wade case, leading to framing leading questions being less effective in influencing their opinions in the survey. In order to modify the effect of volunteer sampling on the opinions of participants, random sampling can be used. Randomly-selected participants will have a varying range of opinions as they will not be self-selected, and their intensity of opinions will differ as well.

A strength of the procedure is the appropriate wording of questions given to the participants in the online survey. Popular diction choices from the media were chosen to increase the universality of the results. Similarly, chosen words in the questions are keywords mentioned frequently when discussing the overturn of Roe vs. Wade to increase the relevance of the survey questions. Similarly, researchers adapted a replication of the original procedure by Loftus and Palmer, changing only specific keywords in the question rather than the whole sentence. The procedure is appropriate to investigate the effect of leading questions in collecting public opinion regarding social policies because words with different implications are chosen, leading to the possibility of participants' opinions being influenced without knowing the research's purpose. A limitation of the procedure is the responses collected only include a narrow range of ages. Although the age range was set to 18-45 for the survey, 58% of the response collected were from participants between the range of 30-44. Perhaps this is the age group that is most informed and direct impacted by the overturn of Roe vs. Wade. By limiting the age range of the participants, the universality of the result is challenged. In order to modify the limitation, the survey should be set to collect responses from all between 18-45. A similar amount of participants in each age range should be recruited.

## 6. Conclusion

Despite the prevalence of biased leading questions in interviews and surveys when investigating the overturn of Roe vs. Wade, little research is done to address the effect of leading questions in influencing female opinions on abortion policies. It is essential to understand the role of diction choices and question framing when presenting public opinions in media. The present study attempts to manipulate diction choices in common questions asked by interviewers when discussing abortion policies to investigate whether there is a significant difference in the responses of women of birthing age in the United States. In investigating the effect of leading questions on opinions regarding the overturn of Roe vs. Wade, the result of the experiment conducted concludes at a p-value of 0.182 or 18%. The null hypothesis is retained. There is no significant difference in the survey responses of American female participants in the fetus-favoring or mother-favoring condition from a survey of 50 responses. Future research into the role of leading questions in discussing anti-abortion policies should address limitations such as the sampling technique, platform used to collect data, and sample design. Furthermore, the present study only investigates the effect of leading questions on the Roe vs. Wade case. Future research could also include other public policy cases in which biased wording is often used during interviews.

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