

Study of U.S. Democratic and Republican Senators' Political Framing Strategies on Abortion Rights Based on Social Identity Theory and Framing Effect

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Abstract. Political framing significantly shapes public opinions and legislative outcomes in the United States, making the understanding of Democratic and Republican senators' strategies concerning abortion rights necessary. This study employs Social Identity Theory and Framing Effect to analyze cognitive and affective language patterns, as well as frequent references to specific word count in senators' speeches, using the Linguistic Inquiry and Word Count (LIWC) program. The findings reveal distinct partisan differences: Democrats frequently emphasize women's rights and personal freedoms, while Republicans focus on morality and the sanctity of unborn life. These divergent framing strategies highlight how party affiliation influences the discourse on this contentious issue. The research, using both qualitative and quantitative approaches, underscores the complexity of political communication and the need for nuanced studies to explore how language reflects and shapes political identities and ideologies.

Keywords: Abortion Rights, Political Framing, Party Identification.

1. Introduction

The impact of the Supreme Court's ruling in *Dobbs v. Jackson Women's Health Organization* on public perception and personal attitudes toward abortion rights reveals significant polarization between Democrats and Republicans [1]. The decision eliminated the federal constitutional right to abortion, leading to substantial state-by-state variations in abortion laws, with some states imposing severe restrictions and others enhancing protections [2]. Individual stances on abortion are influenced by factors such as religious involvement, political affiliation, and personal experiences, with Democrats generally more pro-choice compared to Republicans [3]. State-level abortion policy-making post-*Roe v. Wade* shows that the level of democracy, state legislature partisanship, and higher education levels influence abortion policies, suggesting that variations in senators' stances may be more about the broader political environment than personal beliefs or constituency pressures [4]. Analyzing political discourse through text analysis is essential, as moral framing in referendum politics illustrates how strategic use of moral foundations influences public opinion and voter decisions, highlighting the interplay of moral framing, social identity, and societal change [5].

Previous research, though insightful, often struggles with limitations such as selection bias from opt-in surveys, limited demographic representation, and inadequate exploration of the complexities in state laws. This study seeks to address these issues by analyzing U.S. senators' speeches, incorporating state-level variations and strict selection criteria to create a comprehensive dataset. By examining language and framing strategies, this research aims to clarify the legal and social dynamics of abortion policy. The purpose is to provide a detailed analysis of how political communication shapes public opinion and legislative outcomes on abortion rights. Utilizing both qualitative and quantitative methods, this study contributes to a deeper understanding of political framing, public discourse, and policy-making, offering a significant advancement in political communication studies.

2. The Theoretical Rationale Of Political Framing Strategies

2.1. Social Identity Theory

Social Identity Theory, by Tajfel and Turner, explains how group membership shapes an individual's self-concept and emotional significance. It includes social categorization, identification, and comparison. Senators align their speeches with party norms to gather support, often criticizing the opposition's abortion stance [6]. Political identity has become a central aspect of many Americans' self-concept, leading to increased intergroup conflict and affective polarization. It underscores the importance of understanding political identities in shaping public discourse and framing strategies [7].

2.2. Framing Effect

Framing Effect, by Kahneman and Tversky, suggests that the way information is presented (the frame) influences how audience process, interpret, and react to it. Framing effect highlights certain aspects of an issue to promote a particular interpretation or perspective, thereby influencing public opinion and potentially legislative outcomes. This decision-making bias indicates that varying descriptions of the same issue can lead to different outcomes, particularly when influenced by emotional contexts [8]. To highlight how framing affects public opinion, a research on the Chilean constitution-making process examines how political narratives influence the self-enforcing capacity of interim constitutions. This method can be applied to analyze how senators' speeches, framed in radical or moderate terms, reflect party values and ideologies in shaping political narratives on abortion rights. [9]. My research on conflicting party stances on abortion can also draw on another study on political parties' framing of farm animal welfare by examining how political identity and ideological beliefs shape policy framing and public discourse. Similar to the findings in animal welfare, party affiliation and ideological leanings significantly influence how abortion issues are framed and debated, leading to the overall fragmented landscape [10].

3. Hypothetical Structure

3.1. Hypotheses

Hypothesis 1: Language Use Difference.

Democratic senators will use more cognitive language, such as "women's rights," "choice," and "healthcare," while Republican senators will use more affectively-charged language, including "unborn life" and "moral." This reflects differing party values, with Democrats focusing on freedom and personal rights and Republicans on morality and religious beliefs.

Hypothesis 2: Party Identification

Senators' language and framing regarding abortion rights will align with their party identification. Democrats will favor pro-choice viewpoints, and Republicans will support pro-life positions, demonstrating party-driven language use as suggested by Social Identity Theory.

3.2. Experimental Design

The research employs a between-subject design, comparing speeches by Republican and Democratic senators. Data on U.S. senators between November 2022 and November 2024 was collected from the official government page, including only Democratic and Republican senators, excluding Independents. Out of 100 senators, 31 Democrats and 29 Republicans met the inclusion criteria. Data was gathered from publicly available sources before June 24th, 2022, the date Roe v. Wade was overturned. Sources included floor speeches/hearings, interviews/debates, and public speeches. Floor speeches were prioritized due to their official nature and alignment with party values. Subsequent data genres were considered based on their relevance to the general public. Texts had to be at least 200 words, and only one text per senator was included.

3.3. Method Of Analysis

The Linguistic Inquiry and Word Count (LIWC) program was used for text analysis. Each senator's speech was stored as a Word document and grouped by party affiliation. The texts were processed word by word in LIWC, categorizing each as a function word, pronoun, or verb, and further categorized as analytic, clout, authentic, or tone [11-12]. LIWC calculated the percentage of each category, listing corresponding rates. Words used more than 20 times were further analyzed and grouped into three categories: words used by both parties, only by Democrats, and only by Republicans. JAMOVI software performed T-tests to reveal statistical differences, p-values, and effect sizes (Cohen's *d*). Categories relevant to the hypotheses were examined first, predicting that Democrats would use more cognitive language (e.g., history, human rights) and Republicans more affective language (e.g., unborn lives, morality). Post-hoc tests were conducted on remaining categories to ensure all significant effects were captured, providing insights into the political narratives and stances on abortion rights by each party and senator.

This research utilized the Linguistic Inquiry and Word Count (LIWC) tool to objectively analyze and compare the language used by Democratic and Republican senators, revealing significant linguistic patterns and minimizing the subjectivity of qualitative methods. The diverse range of public speaking sources enhanced the generalizability of the findings. However, grouping all Democrats and Republicans as two entities may oversimplify linguistic complexity and obscure intra-party variations, potentially misrepresenting the entire party's linguistic tendencies. Additionally, the ambiguous nature of LIWC categories and its classification criteria may introduce subjectivity, although word frequency analysis helps mitigate this issue.

4. Results

4.1. Word Frequency

The analysis of word frequency revealed distinct patterns between Republican and Democratic senators. Republicans frequently used terms like "abortions", "children", and "lives", while Democrats emphasized "rights", "healthcare", and "women".

Democrats often discussed "decisions," "freedom," and "opinion," aligning with their values of personal agency and justice. They highlighted human rights, referring to abortion as a "reproductive," "constitutional," and "fundamental" right, especially in cases of severe human rights violations like "rape" and "incest." Democrats focused on expanding healthcare access and opposing abortion bans, emphasizing women's "bodies" and the role of "families" and "doctors".

Conversely, Republicans focused on morality, frequently mentioning "lives" and "pro-life." Their speeches prioritized protecting "children" and "unborn babies," emphasizing the unborn's "human" "feelings" and "pain." They advocated for "medical" "support" in a competitive private market and portrayed their anti-abortion stance as scientific, criticizing Democrats as "radical" and "extreme."

Key references like "Texas" and "Mississippi" highlighted significant legislative actions impacting abortion rights, reflecting the complex political, legal, and social dynamics involved.

4.2. Categories & Dictionaries Programmed In Liwc

In the cognitive words group, "Analytic" and "Insight" categories showed significant differences, with Democrats using more "Insight" words, indicating understanding, while Republicans showed more "Analytic" words, suggesting logical reasoning. The data is shown in Table.1. In the affective words group, Republicans used more words related to negative tone but also positive emotions, indicating a stronger emotional charge, as shown in Table.2.

Table.1. Independent Samples T-Test of Cognitive Words Group

Independent Samples T-Test								
		Statistic	df	p	Mean difference	SE difference		Effect Size
Analytic	Student's t	-2.219	58.0	0.030	-11.779	5.307	Cohen's d	-0.5733
Linguistic	Student's t	1.452	58.0	0.152	1.960	1.350	Cohen's d	0.3751
Cognition	Student's t	0.210	58.0	0.834	0.112	0.534	Cohen's d	0.0543
cogproc	Student's t	0.857	58.0	0.395	0.466	0.543	Cohen's d	0.2214
insight	Student's t	2.264	58.0	0.027	0.750	0.331	Cohen's d	0.5849

Table.2. Independent Samples T-Test of Affective Words Group

Independent Samples T-Test								
		Statistic	df	p	Mean difference	SE difference		Effect Size
Tone	Student's t	0.808	58.0	0.423	3.4968	4.3289	Cohen's d	0.209
Affect	Student's t	-1.992	58.0	0.051	-0.7248	0.3638	Cohen's d	-0.515
tone_neg	Student's t	-2.007	58.0	0.049	-0.5747	0.2864	Cohen's d	-0.518
emotion	Student's t	-2.373	58.0	0.021	-0.3147	0.1326	Cohen's d	-0.613
emo_pos	Student's t	-2.357	58.0	0.022	-0.2162	0.0917	Cohen's d	-0.609
emo_neg	Student's t	-0.726	58.0	0.471	-0.0653	0.0899	Cohen's d	-0.188
emo_anger	Student's t	-1.426	58.0	0.159	-0.0502	0.0352	Cohen's d	-0.368
feeling	Student's t	-1.984	58.0	0.052	-0.1811	0.0913	Cohen's d	-0.512

Specific word groups, shown in Table.3., demonstrated Democrats using terms related to power, female references, and future orientation, while Republicans emphasized family and time, often mentioning children and shorter gestational ages. The remaining words group, as presented in Table.4., revealed significant differences, with Democrats emphasizing the need for abortion rights and Republicans using terms like “pregnancy,” “die,” and “kill,” aligning with their moral stance.

Table.3. Independent Samples T-Test of Specific Words Group

		Statistic	df	P	Mean difference	SE difference		Effect Size
power	Student's t	1.9117	58.0	0.061	0.85893	0.449	Cohen's d	0.4939
moral	Student's t	-0.0840	58.0	0.933	-0.00968	0.115	Cohen's d	-0.0217
family	Student's t	-2.5534a	58.0	0.013	-0.54587	0.214	Cohen's d	-0.6597
female	Student's t	4.5973a	58.0	< .001	1.48690	0.323	Cohen's d	1.1877
Physical	Student's t	-1.5768	58.0	0.120	-0.68640	0.435	Cohen's d	-0.4073
health	Student's t	-1.1274	58.0	0.264	-0.44393	0.394	Cohen's d	-0.2912
time	Student's t	-1.9940	58.0	0.051	-0.61637	0.309	Cohen's d	-0.5151
focuspast	Student's t	0.6353	58.0	0.528	0.24443	0.385	Cohen's d	0.1641
focusfuturel	Student's t	3.4555	58.0	0.001	0.85972	0.249	Cohen's d	0.8927

Table.4. Independent Samples T-Test of Remaining Words Group

		Statistic	df	p	Mean difference	SE difference		Effect Size
friend	Student's t	-2.55	58.0	0.014	-0.0469	0.0184	Cohen's d	-0.658
sexual	Student's t	-2.14	58.0	0.037	-0.4192	0.1959	Cohen's d	-0.553
death	Student's t	-2.08	58.0	0.042	-0.1219	0.0587	Cohen's d	-0.536
need	Student's t	2.26a	58.0	0.028	0.2836	0.1256	Cohen's d	0.583

5. Conclusions

The trend of political polarization in the U.S. provides a basis for analyzing language use and framing strategies in political discourse, but classical methods often lack depth in capturing nuanced differences. In this study, LIWC analysis revealed that while there were no significant differences in cognitive language use between Democratic and Republican senators, Republicans employed more affectively-charged language. Word frequency analysis indicated that Democrats frequently used terms such as "women's rights," "personal choice," "healthcare," and "justice," whereas Republicans emphasized "unborn lives," "feelings," and "abortions." Both parties valued "families," but the effects of "morality" and "religious values" were ambiguous. Furthermore, the study supported the hypothesis that senators' language and framing of abortion rights strongly reflect party affiliation, with Democrats uniformly supporting pro-choice views and Republicans pro-life views. This alignment highlights Democrats' emphasis on personal freedom, privacy, social equality, justice, and healthcare rights, while Republicans focus on sanctity, morality, and personal responsibility to self, family, and society. These findings underscore the need for more nuanced approaches in future political communication studies to better understand the complexities of partisan rhetoric.

References

- [1] CClark, C. S., Paluck, E. L., Westwood, S. J., et al. Effects of a US Supreme Court ruling to restrict abortion rights [J]. *Nature Human Behaviour*, 2024, 8: 63–71.
- [2] Davis, M. F. The state of abortion rights in the US [J]. *International Journal of Gynecology & Obstetrics*, 2022, 159(1): 324-329.
- [3] Hess, J. A., & Rueb, J. D. Attitudes toward abortion, religion, and party affiliation among college students [J]. *Current Psychology*, 2005, 24(1): 24–42.
- [4] Naughton, D. C. What influences reproductive rights policy? State abortion restrictions and the level of state democracy [J]. *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal*, 2024.
- [5] Atikcan, E. Ö., & Hand, K. Moral framing and referendum politics: Navigating the empathy battlefield [J]. *Political Psychology*, 2023, 45(1): 193-210.
- [6] Csiszer, A. Social identity as a tool of sustainable public deliberation [J]. *Technium Social Sciences Journal*, 2020, 12: 61–[vii].
- [7] Brown, J. K., & Hohman, Z. P. Extreme party animals: Effects of political identification and ideological extremity [J]. *Journal of Applied Social Psychology*, 2022, 52(5): 259-401.
- [8] Tao, R., Zhang, C., Zhao, H., Xu, Y., Han, T., Dai, M., Zheng, K., Zhang, N., & Xu, S. A negative emotional context disrupts the framing effect on outcome evaluation in decision making under uncertainty: An ERP study [J]. *Psychophysiology*, 2023, 60: e14207.
- [9] Prieto, M., & Verdugo, S. (2021). How political narratives affect the self-enforcing nature of interim constitutions: Assessing challenges and politics of the Chilean constitution-making process [J]. *Hague Journal on the Rule of Law*, 13(2-3), 265-293.
- [10] Hårstad, R. M. B., & Vik, J. Political parties' framing of farm animal welfare: A fragmented picture [J]. *European Policy Analysis*, 2023, 9(1): 30-47.
- [11] Pennebaker, J. W., Boyd, R. L., Booth, R. J., Ashokkumar, A., & Francis, M. E. *Linguistic Inquiry and Word Count: LIWC-22* [M]. Pennebaker Conglomerates, 2022.
- [12] Tausczik, Y. R., & Pennebaker, J. W. The psychological meaning of words: LIWC and computerized text analysis methods [J]. *Journal of Language and Social Psychology*, 2010, 29(1): 24-54.