

Public Opinions on Sexual Education in Public Schools: An Analysis of Political, Educational, and Generational Influences in the United States from 1972 to 2022*

Wanling Ma

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This paper analyzes public opinions on sexual education in public schools across the United States, utilizing data from the General Social Survey (GSS) to explore how political affiliations, educational backgrounds, and age demographics shape these views. We discovered that support for sexual education is broadly strong but varies significantly with political ideology, education level, and generational differences, with Democrats, higher-educated individuals, and younger respondents showing the most support. These findings highlight the deep interconnection between personal characteristics and attitudes towards sexual education, reflecting wider societal and cultural debates on the topic. Ultimately, our study underscores the importance of considering diverse perspectives in the formulation and implementation of sexual education policies, revealing the potential for education as a unifying force in addressing public health and societal well-being.

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*Code and data are available at: <https://github.com/WanlingMa/Favor-or-oppose-sex-education-in-public-schools>

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1 Introduction

In this paper, we conduct an exploration of public opinions on sexual education in public schools within the United States by leveraging the dataset from the General Social Survey (NORC 2022b). This paper reveals patterns influenced by political affiliations, educational backgrounds, and age demographics. Our analysis demonstrates a robust support for sexual education across the board, yet with significant variations: Democrats and those with higher education levels exhibit stronger favorability towards sexual education, compared to their Republican counterparts and individuals with lower educational attainments. Additionally, a generational divide is evident, with younger respondents showing a more pronounced support

for sexual education, suggesting shifting societal norms and the influence of contemporary values on educational preferences.

This study’s findings are pivotal, underscoring the complex interplay between individual characteristics and opinions on sexual education. Political ideology emerges as a critical factor, with a notable divide between different party affiliations, reflecting broader national debates on the role of sexual education in public schools. Educational attainment further compounds these differences, highlighting the impact of education not just as a demographic variable, but as a lens through which societal issues are interpreted and understood. Age, as a proxy for generational perspective, offers insights into evolving attitudes towards sexual education, pointing towards a future where such programs might be more widely accepted.

The estimand is defined as the influence of political affiliation, educational attainment, and age on public opinions towards sexual education in public schools. By isolating these key variables, our analysis seeks to quantify how deeply and in what directions these demographic factors steer individual support or opposition to sexual education programs. This estimand serves as the backbone of our study, guiding the investigation to uncover the underlying patterns that characterize public sentiment on this contentious educational topic.

The structure of the paper is designed to facilitate a comprehensive understanding of the research process and findings. The Data section (Section 2) delves into the GSS dataset, detailing the selection criteria, cleaning processes, and the challenges encountered, such as missing data and the shift to online survey methodologies. The Results section (Section 3) presents the core of our analysis, visualizing the relationship between opinions on sexual education and variables like political affiliation, education level, and age, supported by statistical evidence. Finally, the Discussion (Section 4) section synthesizes these findings within the broader context of existing literature, offering interpretations of the observed trends and suggesting avenues for future research to build upon the complex dynamics uncovered in this study.

2 Data

For our study, we retrieved data from the General Social Survey (GSS), a comprehensive and widely respected source of data that captures Americans’ attitudes, behaviors, and attributes since 1972. The dataset includes variables such as respondents’ age, their highest educational degree, political identification, opinions on sexual education in public schools, and the year of data collection. This diverse set of variables allows us to analyze trends and factors influencing views on sexual education in public schools over time.

2.1 Source Data

The demographic dataset, described in Table 1, focuses on basic respondent information including age, highest educational degree, and political identification, complemented by the

year of data collection. This dataset lays the groundwork for understanding the demographic backdrop against which opinions on sexual education are formed.

Table 1: Demographic data obtained from GSS

Variable	New Name	Description	Example
age	Age	Respondent’s age	25
degree	Degree	Respondent’s highest educational degree	High school
partyId	Party ID	Respondent’s political identification	Democratic
year	Year	Year of data collection	2000

The core dataset of our study, outlined in Table 2, captures respondents’ direct opinions on sexual education in public schools, classified as either in favor or against. Analyzing these opinions is crucial for understanding public sentiment towards sexual education in public schools.

Table 2: Opinions about Sexual Education in public school

Variable	New Name	Description	Example
SexEduc	Sex Education	Opinion about sexual education in public schools	Favor

2.2 Measurement

The General Social Survey (GSS) employs a methodology for capturing data on public opinions towards sexual education, alongside demographic variables such as political affiliation, educational attainment, and age. Each variable is quantified to accurately reflect respondents’ perspectives and backgrounds. For instance, opinions on sexual education are gathered through direct questioning, such as, “Would you be for or against sex education in the public schools?”, with responses coded into predefined categories for detailed analysis (NORC 2022a). Educational attainment is measured by the highest level of education respondents have completed, categorized from ‘Less than high school’ to ‘Graduate degree’. Age is recorded as a continuous variable, offering insights into generational differences in attitudes towards sexual education. This systematic approach ensures that the dataset reliably mirrors the nuanced viewpoints and demographic characteristics of the American populace, providing a solid base for exploring the dynamics influencing public opinions on sexual education.

2.3 Ethics and Bias

The GSS upholds ethical standards by ensuring the anonymity and confidentiality of respondents, essential for eliciting honest and candid responses. Participants are informed about

their rights as respondents, and are assured that their participation is voluntary, with the option to withdraw at any time. These measures adhere to the ethical principles of respect for persons, beneficence, and justice, safeguarding the dignity and privacy of individuals while collecting data that could inform policy and educational content.

Despite these precautions, potential biases such as response bias may still influence the data. Respondents might alter their answers based on perceived social desirability or due to discomfort with discussing sexual education openly, leading to underreporting or overreporting of certain views. Acknowledging and addressing these biases is crucial for the integrity of the research process. Efforts to mitigate such biases include the careful design of survey questions, the use of neutral language, and the provision of a secure and respectful environment for data collection. Through vigilant attention to ethics and bias, the research strives to produce findings that are not only insightful but also respectful and representative of the population's diverse opinions on sexual education.

2.4 Data Limitation

2.4.1 Changes in Survey Methodology

The 2022 General Social Survey (GSS) undertook a notable methodological transition to a multimode survey design, incorporating face-to-face, web, and telephone interviews, a shift primarily informed by the challenges presented by the COVID-19 pandemic (NORC 2022a). This adaptation introduced an experimental design where sampled cases were randomly assigned to either start with face-to-face interviews followed by a web survey for non-respondents, or begin with a web survey and then offer face-to-face interviews for non-respondents. This experiment aimed to explore the impacts of survey mode on response patterns and data quality, with 94.2% of respondents completing the survey in a single mode and 5.8% in multiple modes. Notably, the survey achieved a 50.5% response rate, a significant increase from the 17% response rate of the primarily web-based 2021 GSS, underscoring the potential of multimode approaches to enhance participation (NORC 2022a).

The implications of this methodological shift for research, particularly studies like ours on public opinions regarding sexual education in public schools, are multifaceted. The introduction of different modes may introduce mode effects, where the method of data collection influences how participants respond to questions, especially on sensitive topics. This variability could lead to differences in response rates, the completeness of data, and possibly the willingness of respondents to discuss controversial issues like sexual education. For our survey, this methodological evolution represents a data limitation in that comparisons across years or interpretations of trends in public opinion must be approached with caution. Understanding that responses from 2022 might be influenced by the mode of data collection is crucial for accurately analyzing shifts in public opinion on sexual education, requiring sophisticated statistical techniques to disentangle genuine changes in attitudes from methodological artifacts.

2.4.2 Data Availability

2.4.2.1 Missing Ballot C in the Sexual Education Dataset

The General Social Survey (GSS) employs a split-ballot design, dividing questions among different versions of the questionnaire, or “ballots,” to efficiently cover a wide array of topics. The absence of Ballot C from the Sexual Education Dataset, while Ballots A and B are present, indicates a notable gap in the dataset. This omission is significant because each ballot typically targets a distinct set of questions or themes, meaning that unique insights and data collected through Ballot C are missing from the analysis. The lack of Ballot C’s data may lead to a loss of insights from respondents who were allocated to this ballot, potentially skewing the understanding of public opinions or demographic differences related to sexual education. This gap not only limits the breadth of questions that can be analyzed but also affects the study’s ability to draw comprehensive conclusions about attitudes toward sexual education. By missing out on the data from Ballot C, researchers are deprived of a full picture, which can undermine the representativeness of findings and may lead to incomplete or biased interpretations of societal attitudes toward sexual education policies and perceptions.

2.4.2.2 Missing Years in Data Collection

The absence of data for certain years, notably the shift from a planned 2020 data collection to 2021, presents a discontinuity in the longitudinal dataset of the GSS. This gap, particularly influenced by the COVID-19 pandemic, poses challenges for trend analysis and longitudinal studies aiming to understand changes in attitudes toward sexual education over time. The year 2020 was pivotal globally due to the pandemic, and missing data from this period means missing insights into how societal attitudes may have shifted in response to the global crisis and its impact on education systems, including sexual education. Transitioning to 2021 for data collection attempts to bridge this gap, but the temporal discontinuity introduces complexity in interpreting trends, requiring researchers to account for this break in the data when analyzing changes over time or drawing comparisons across years.

2.4.2.3 High Rate of Missing Cases

The dataset’s significant proportion of missing cases, with 31,615 cases not providing responses to questions related to sexual education out of a total of 72,390 cases, underscores a substantial data availability issue. This high rate of non-response could indicate several limitations, including possible respondent discomfort with the topic, lack of knowledge, or even survey fatigue. In the context of sexual education—a subject that can be sensitive for many individuals—the willingness or ability to answer related questions might not be evenly distributed across the survey population. This unevenness risks skewing the data towards those more inclined to respond, potentially those with stronger opinions or more direct experience with the topic, thereby compromising the representativeness of the dataset. Consequently, this

limitation necessitates careful consideration and possibly the application of statistical adjustments or weighting to mitigate biases and ensure that findings accurately reflect the broader population’s views on sexual education.

2.5 Data Processing

Data was collected, processed, and analyzed using the statistical programming software R (R Core Team 2023b), using functions from `tidyverse` (Wickham et al. 2019), `ggplot2` (Wickham 2016), `dplyr` (Wickham et al. 2023), `palmerpenguins` (Horst, Hill, and Gorman 2020), `foreign` (R Core Team 2023a).

To process and analyze the General Social Survey (GSS) data relevant to our study on sexual education, I began by selecting interested data entries through the GSS website, leveraging the GSS Data Explorer for this purpose. This tool facilitated the creation of a data extraction package, which included a `.dat` file (containing the raw survey data), a `.dct` file (defining the data format), and an R script. This R script uses the `.dat` and `.dct` files to automatically generate a dataframe in R, streamlining the initial data handling process. Subsequently, I addressed the challenge of the dataset’s encoded responses—where opinions, votes, and other responses are represented numerically—by translating all codes based on the comprehensive codebook available on the GSS homepage. This translation process ensured that the dataset was interpreted and ready for in-depth analysis. Additionally, I cleaned the data by removing entries with values less than 0, as these are considered missing or inappropriate data, further refining the dataset for accurate analysis.

3 Results

3.1 Respondents’ Ages

The age distribution of respondents in the dataset, as illustrated by Figure 1, provides a comprehensive overview of the demographic makeup of the survey participants. The age ranges from 18 to over 89 years with median age to be 44. The distribution shows a relatively higher concentration of respondents in the younger age brackets, particularly between 23 to 38 years, suggesting a strong representation of young and middle-aged adults in the survey. This skew towards younger demographics could reflect the survey’s reach or the accessibility of the survey mode to these age groups.

3.2 Respondents’ highest educational degree

Respondents’ highest educational degree spanning from 1972 to 2022 shows a significant shift in the educational attainment of respondents, with a decreasing trend in those with less than

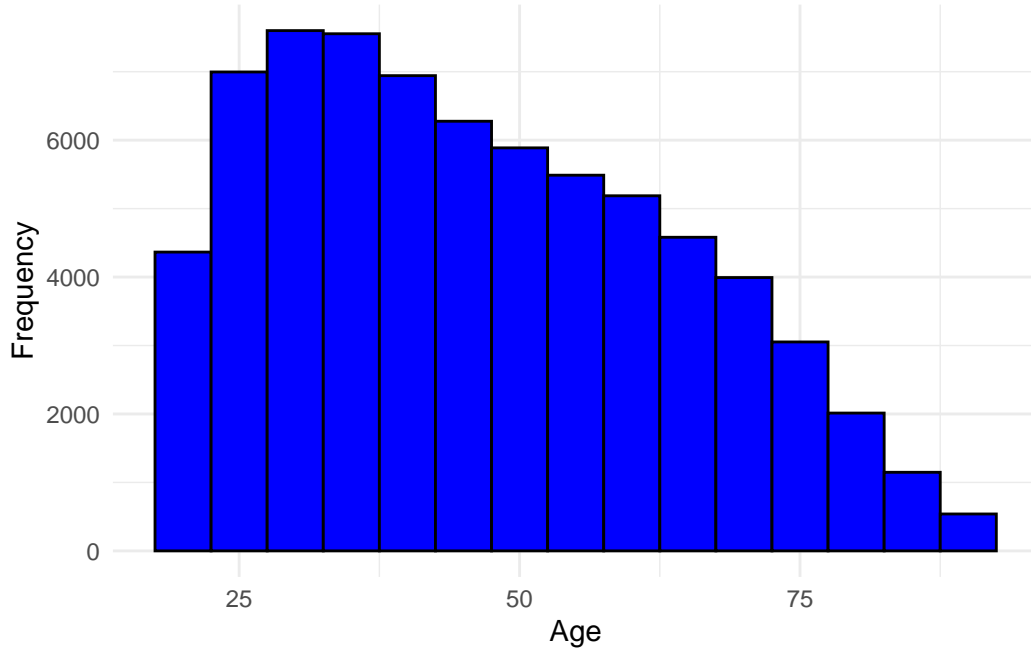


Figure 1: Histogram of Respondent Ages

a high school diploma and a concurrent rise in those holding Bachelor’s and Graduate degrees, as shown in Figure 3. Initially, Figure 2 shows that respondents predominantly reported a high school level education or below, but recent years show a transition, with higher education degrees becoming more common. This reflects a societal trend towards greater educational achievement, likely influenced by economic factors, career advancement opportunities, and greater access to higher education. These changes have implications for public policy and suggest a shift in the societal valuation of education.

The early dominance of high school education or less among respondents may have influenced the survey’s findings, particularly regarding opinions on sexual education in public schools. If higher education correlates with more progressive views—a notion supported by some studies—the increase in college and graduate degree holders could imply a shift towards greater acceptance of sexual education programs. This potential change highlights the importance of accounting for educational background in analyzing survey data to ensure that shifts in public opinion are not confounded by the changing educational composition of respondents.

3.3 Respondent’s political identification

Figure 4 tracks the political affiliations of respondents from 1972 to 2022, showing a diverse political landscape over the fifty-year span. Democrats consistently account for a significant portion of the responses, with numbers typically higher than Republicans, Independents, and

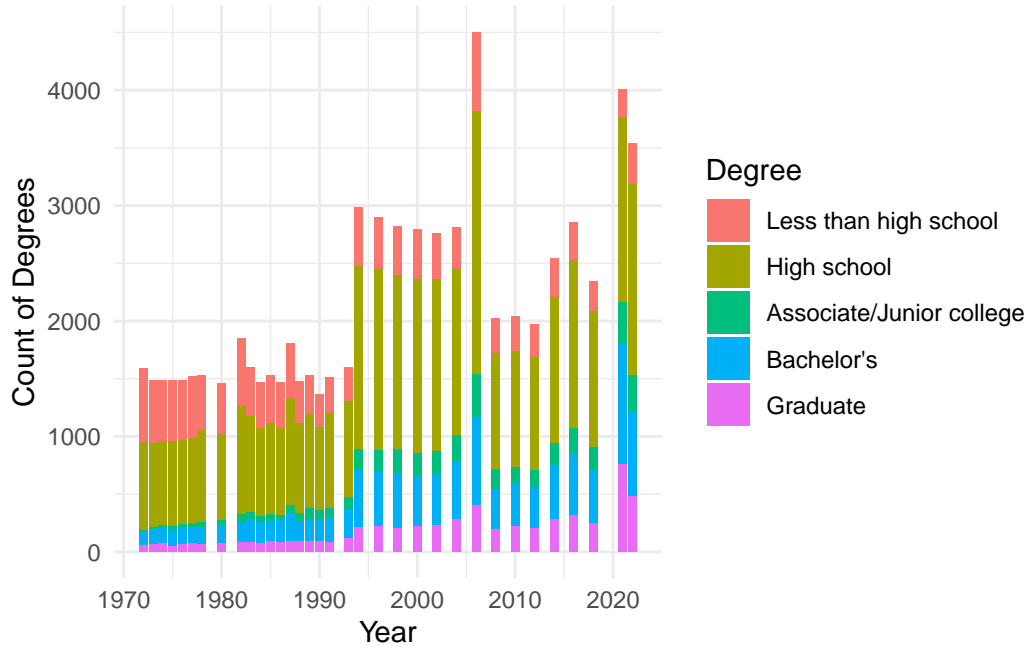


Figure 2: Distribution of Respondent's Highest Degree Over 1974 - 2022

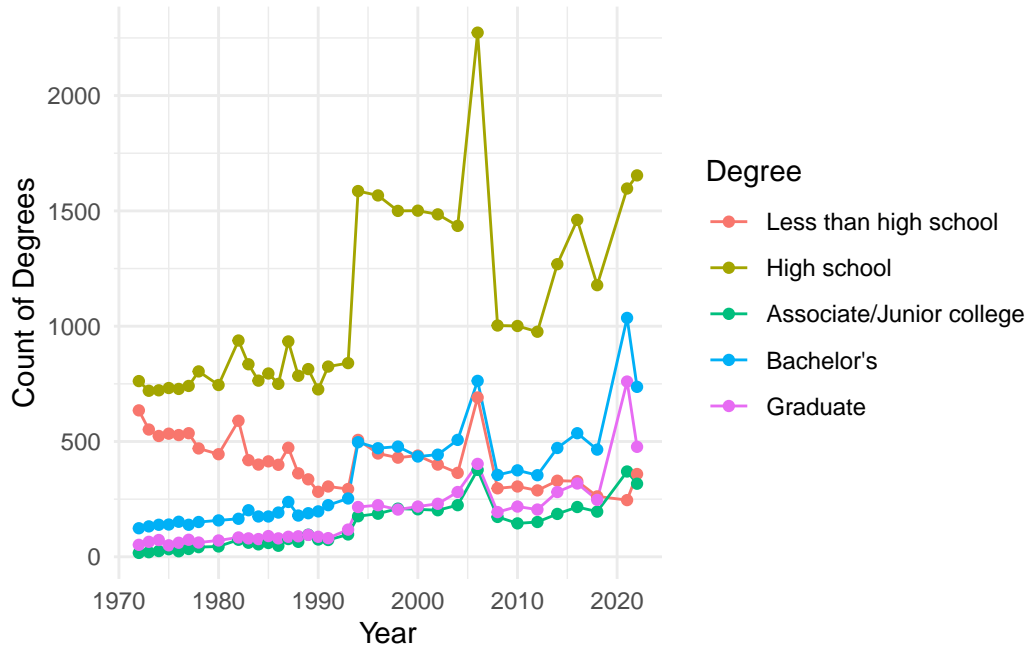


Figure 3: Trend of Respondent's Highest Degree Over 1974 - 2022

those identifying with ‘Other’ categories. However, there’s an observable increase in the count of Independents and ‘Other’ over time, reflecting a potential rise in political diversification and a move away from strict two-party identification.

The data for 2006 and 2022 reveal a notable uptick in all political affiliations, possibly indicating increased political engagement during these years. Democrats and Republicans show a closing gap, with Independents also seeing a considerable increase, suggesting a shift in political alignment or the growing importance of non-party-specific issues influencing public opinion. This diversifying political identification among the surveyed population could significantly influence their opinions on public policies, including sexual education in schools, and warrants consideration in analyzing trends over time.

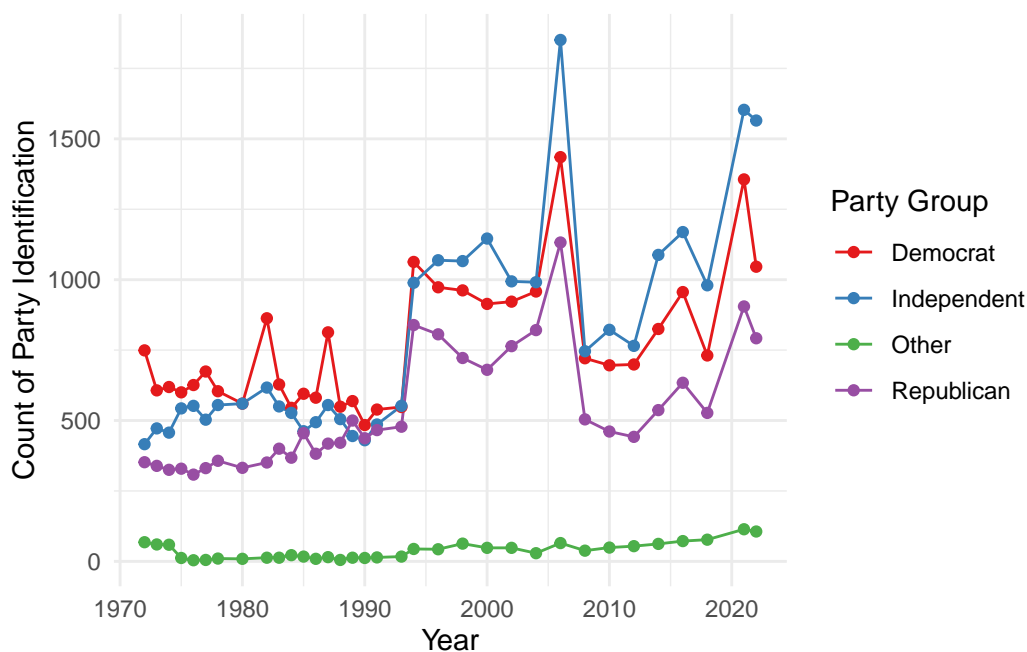


Figure 4: Trend of Respondent’s Political Affiliations Over 1974 - 2022

3.4 Sex Education Opinion

Next, we would focus on the dataset that shows the respondents’ opinions about sexual education in public school. The dataset, as visualized in Figure 5, reveals a clear trend in public opinion towards sexual education in public schools, with a significant majority expressing favor over the years. The number of votes favoring sexual education consistently surpasses those opposing it, indicating strong support for such programs among the surveyed population. Notably, the support for sexual education reaches its peak in the 2021, with the highest number

of votes in favor recorded at 2450, compared to earlier years where the support, while still dominant, hovers around lower figures such as 1169 in 1974, which is the first year documented.

On the other hand, the opposition to sexual education in public schools shows a relatively stable trend with much lower numbers throughout the years, peaking at 318 votes in the early years and not exceeding this number in subsequent years. The relatively low and stable count of votes opposing sexual education, coupled with a peak at only 292 votes in the 2022, underscores a consistent, albeit smaller, segment of the population resistant to the idea. This contrast between the growing support for and stable opposition to sexual education highlights an increasing societal acceptance and potentially the recognized importance of sexual education in public schools over time. In our paper, we are also going to find out what factors are contributing to such resistant opposing sexual education.

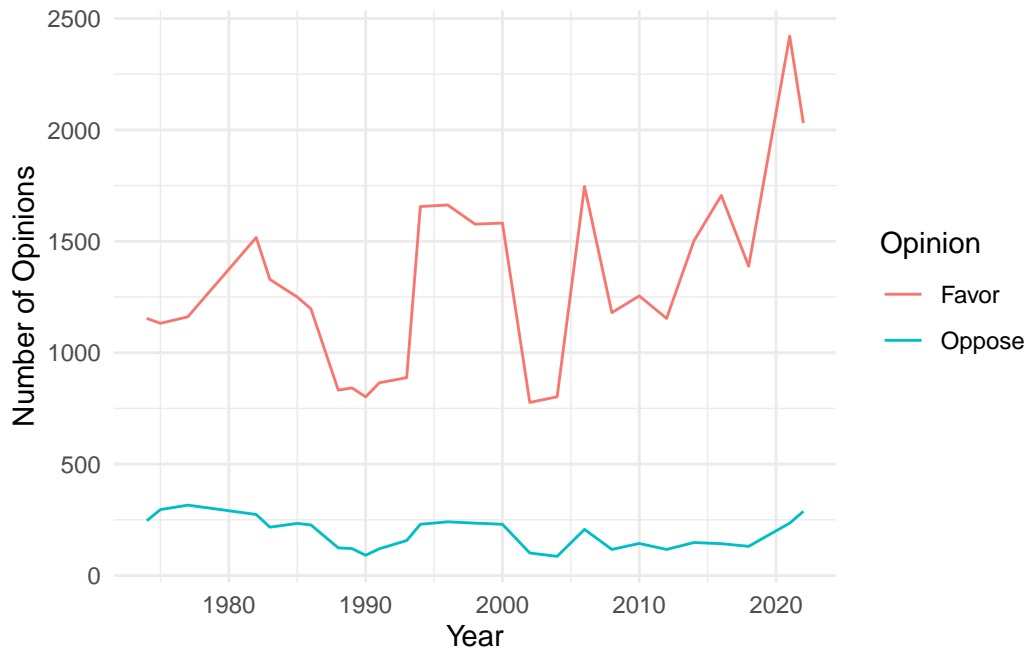


Figure 5: Trend of Respondent Opinions on Sexual Education in Public School Over 1974 - 2022

4 Discussions

4.1 Generational Divides in Attitudes Towards Sexual Education

From Figure 6, we can see a significant correlation between the respondent's age and their opinions on sexual education in public schools, highlighting a generational divide in attitudes.

Younger respondents tend to favor sexual education more, whereas older respondents are more likely to oppose it. Such a trend is not entirely surprising, given the stereotypical view that older people tend to hold more conservative beliefs, particularly regarding subjects as sensitive as sex education. These individuals are often perceived to resist changes in societal norms, including the introduction or expansion of sexual education in public schools. This observation is crucial for understanding the landscape of public opinions on sexual education and has significant implications for policy and curriculum development within educational institutions.

The study by Russell (1998) provides a foundational perspective on this topic by investigating the impact of sexual education content on teenage motherhood. This research underscores the importance of age in shaping the outcomes and perceptions of sexual education, suggesting that early exposure to comprehensive sexual education can influence life outcomes significantly. This aligns with the observed trend in our analysis, where younger respondents showed a higher favorability towards sexual education, potentially due to the benefits of early and comprehensive education in shaping progressive views on sexual health and education.

In a complementary vein, Ewen and Brown (2012) delve into how political views, often intertwined with age, influence attitudes towards sexual behaviors among older adults. This study elucidates the broader societal and generational perspectives that underpin attitudes towards sexual education, revealing that older adults' more conservative views may reflect in their skepticism or opposition to sexual education in schools. Such insights help explain the negative correlation between age and support for sexual education observed in our dataset, reinforcing the significance of considering generational perspectives in the discourse on sexual education (Ewen & Brown).

Furthermore, Vargas Stevenson (2016) and Park (2017) contribute to our understanding by exploring the opinions of adults (parents and teachers) and the characteristics of adolescent sexuality and sex education, respectively. Vargas Stevenson's focus on adult perspectives offers insight into the challenges of implementing sexual education policies that align with generational expectations and norms. Park's examination of gender-sensitive approaches in sex education for adolescents highlights the evolving nature of educational strategies and their reception among younger populations. These studies collectively underscore the critical role of age in shaping and understanding public opinions towards sexual education, emphasizing the need for age-appropriate and inclusive education strategies to cater to the diverse needs of the student population (Vargas Stevenson; Park).

In conclusion, the literature vividly illustrates the intricate relationship between age and attitudes towards sexual education, supporting the statistical findings of our dataset analysis. This body of work not only validates the observed generational differences in opinions on sexual education but also highlights the importance of tailoring educational policies and programs to bridge the gap between varying age groups, ensuring that sexual education is both effective and relevant across the lifespan.

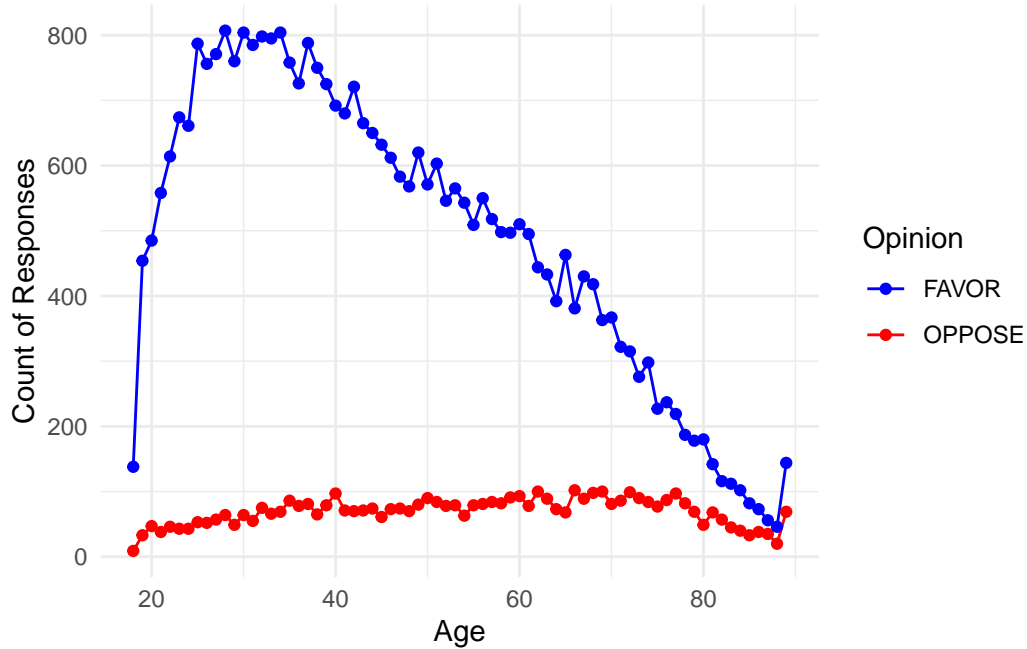


Figure 6: Respondents’ Opinions on Sexual Education in Public School versus Respondents’ Ages Over 1974 - 2022

4.2 Educational Attainment and Support for Sexual Education

From Figure 8, we can see that the relationship between educational level and opinions on sexual education in public schools unveils a noteworthy trend: as educational attainment increases, the proportion of individuals favoring sexual education significantly rises. This pattern suggests a correlation where individuals with higher education levels are more inclined to support sexual education, possibly due to a broader understanding of its importance in promoting health and well-being among students. From Figure 7, it’s observed that respondents with a High School degree have the highest number of votes in favor. However, this might not accurately reflect true favorability, as the larger population of High School respondents inherently leads to a higher volume of votes, as shown in Figure 3. Therefore, Figure 8, which delineates the favorability rate—percentage of favorable responses within each educational category—provides a clearer insight. This rate is a more precise indicator of support for sexual education across different educational levels, underscoring the nuanced impact of educational attainment on public opinions towards sexual education.

This correlation is supported by the research of Hamilton-Ekeke (2019), who explored the reluctance of parents, irrespective of their educational background, to discuss sexual matters with their children. This reluctance, which may stem from cultural or personal discomfort, potentially leads to a greater appreciation for formal sexual education in schools among

more educated individuals, recognizing its role in filling the informational void left by parents (Hamilton-Ekeke 2019).

Similarly, Hulme Chambers et al. (2017a) highlighted the challenges faced by teachers in delivering sexual education, particularly due to inadequate training—a factor that might be more perceived by individuals with higher educational backgrounds. These individuals may advocate for sexual education as a means to ensure that students receive accurate and comprehensive information, underscoring the influence of educational level on public opinions towards sexual education in schools (Hulme Chambers et al. 2017a).

Moreover, studies such as the one conducted by O, A, and R (2018) in Lagos State demonstrate that educational level can shape students' perceptions of the effectiveness of sexual education on their behavior, further suggesting that educational attainment plays a role in shaping supportive attitudes towards sexual education. This is echoed in the findings of Bytautas and Daukilas (2023), who discuss how value narratives and communication principles among educators, organizations, and parents—factors influenced by educational level—impact the motivational environment surrounding sexual education (Bytautas and Daukilas 2023).

In essence, the literature elucidates the significant influence of educational level on public opinions towards sexual education, highlighting a trend where higher educational attainment correlates with increased support for sexual education in public schools. This underscores the need for policies and programs that recognize and leverage the varying perspectives across different educational levels to foster a comprehensive and inclusive approach to sexual education.

4.3 Political Affiliation and Its Influence on Sexual Education Opinions

In this section, we are going to compare political affiliation and opinions on sexual education in public schools. This comparison reveals important insights that underscore the influence of political ideology on public support for sexual education. Democrats and Independents show a strong preference for sexual education, with 13,004 and 13,224 individuals respectively favoring it, compared to their Republican counterparts, where 8,233 are in favor. However, it's crucial to note the proportional differences in opposition, where Republicans exhibit a higher rate of opposition (1,787) compared to Democrats (1,507) and Independents (1,612), despite having a lower total count of favorable responses.

This pattern aligns with the broader discourse on the politicization of sexual education in the United States, where political affiliation often correlates with varying degrees of support for or resistance to sexual education in schools. The literature provides insights into this phenomenon. For instance, Hulme Chambers et al. (2017b) highlight how government policy and political climates significantly impact the delivery of sexual education, reflecting broader societal attitudes and the political will to support such programs. Additionally, Klaus (2015) examines the leadership challenges in navigating the contentious debates over public school

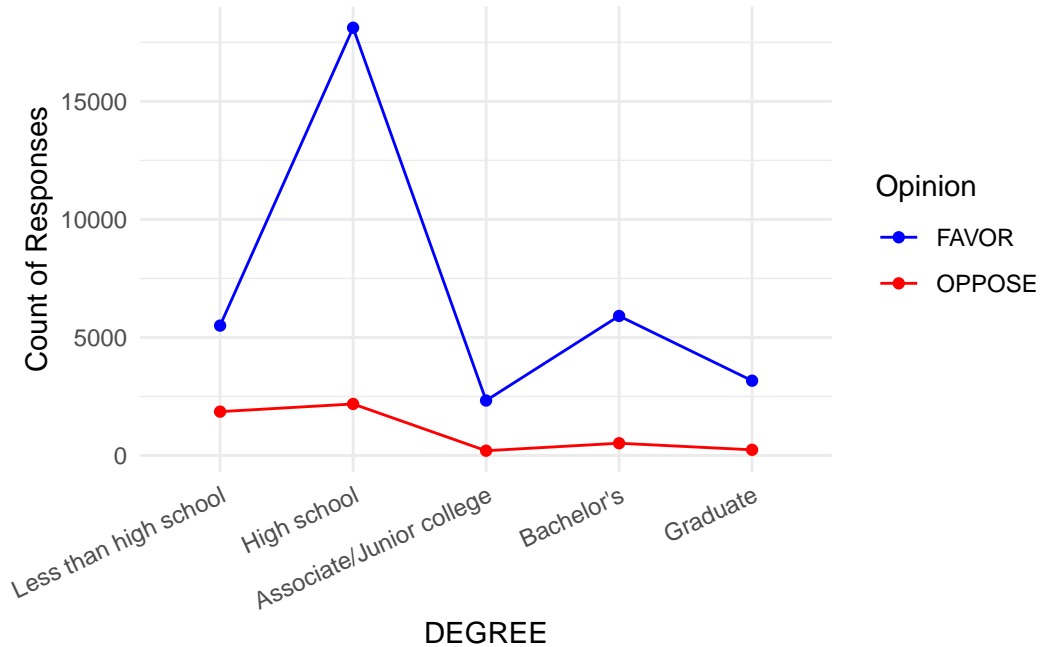


Figure 7: Respondents' Opinions on Sexual Education in Public School versus Respondents' Highest Degree Over 1974 - 2022

sexuality education in the United States, pointing to the deeply ingrained political and ideological divides that shape policy and practice in this area.

The findings from Puglia and Garcia (2016) further elucidate how political affiliation intersects with societal values, revealing a tendency for more conservative political groups to reject LGBTQ+ topics in educational settings, underscoring the broader cultural and political battleground that sexual education represents. Similarly, Rafal (2010) discusses the unique influence of public opinion on sex education policy in Virginia, underscoring the pivotal role of political affiliation in shaping the discourse and implementation of sexual education policies.

In conclusion, the comparison and corresponding literature collectively highlight the significant impact of political affiliation on public opinions towards sexual education in public schools. These trends not only reflect the politicized nature of sexual education in the United States but also emphasize the need for policymakers and educators to navigate these ideological divides carefully. By understanding the political and cultural contexts that influence public opinions, stakeholders can better advocate for and implement sexual education programs that address the needs and values of diverse communities.

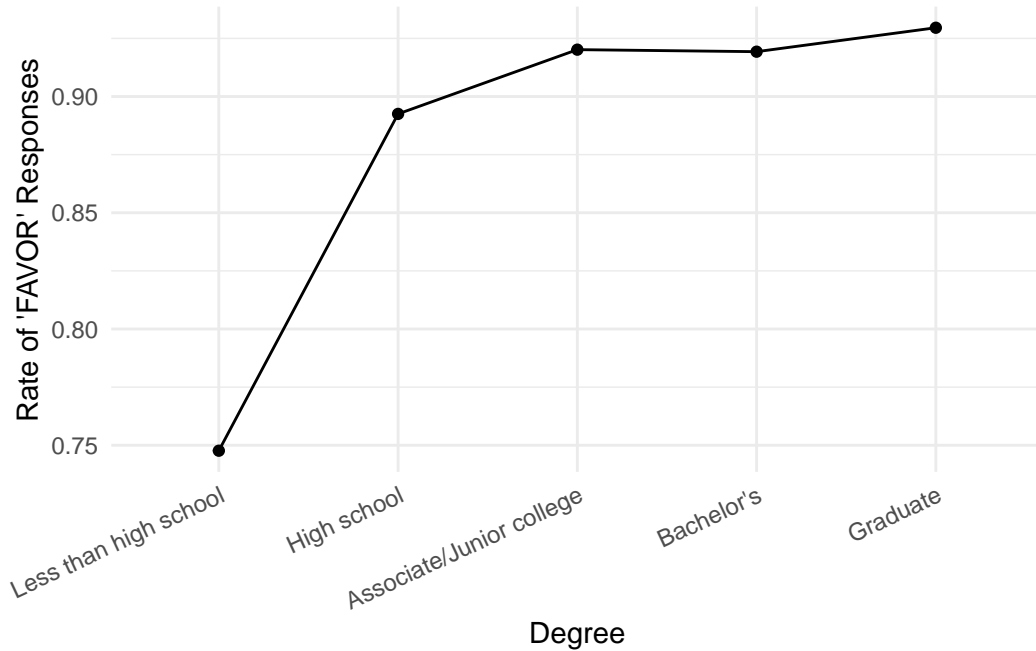


Figure 8: Rate of Favor on Sexual Education in Public School versus Respondents' Highest Degree Over 1974 - 2022

4.4 Limitation

The dataset employed in our study is incomplete, notably missing data from the pivotal year of 2020, which may have been a critical juncture due to the global COVID-19 pandemic. This gap presents a discontinuity in the temporal sequence, potentially affecting the integrity of longitudinal analyses. Furthermore, the GSS's shift to online data collection methods could introduce methodological variations affecting response patterns, especially given the sensitive nature of topics like sexual education. The use of multiple-choice questions within the GSS also poses limitations, as it confines responses to pre-determined categories, potentially overlooking the nuanced reasons behind individuals' opinions on sexual education. A richer dataset that spans all expected data collection years and encompasses diverse areas of information would enable a more comprehensive analysis.

Enhancing the GSS with open-ended questions could allow respondents to elaborate on their reasons for favoring or opposing sexual education topics. These qualitative responses could then be analyzed using advanced Large Language Models to parse and derive deeper insights into the underlying motivations and values influencing public opinion. Incorporating this additional layer of data could provide a more robust and multidimensional understanding of the factors driving attitudes toward sexual education, thereby strengthening the validity and applicability of the research findings. It would also facilitate a more informed and nuanced

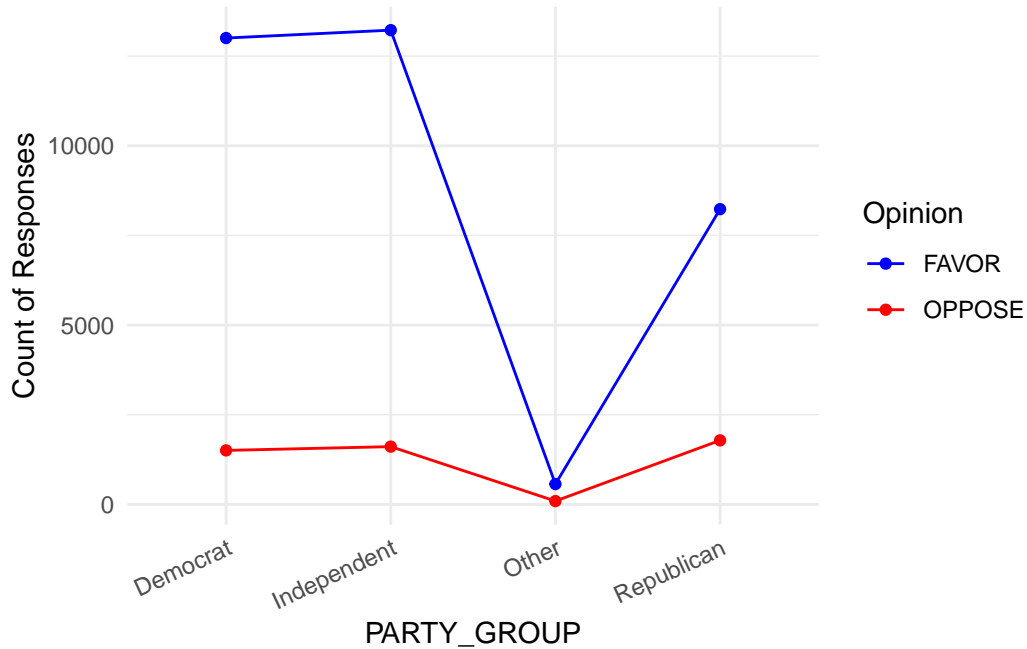


Figure 9: Respondents' Opinions on Sexual Education in Public School versus Respondents' Highest Degree Over 1974 - 2022

approach to policy-making and curriculum development that aligns with the complex spectrum of public sentiment.

4.5 Next Steps

To extend the breadth and depth of this research, future studies should seek to synthesize quantitative survey data with qualitative insights, perhaps through follow-up interviews or focus groups that delve into the motivations behind individuals' support or opposition to sexual education in public schools. This approach would allow for the extraction of complex opinion patterns and the cultural and emotional underpinnings of public sentiment. Moreover, embracing novel data sources such as social media discourse and legislative voting records could illuminate the public's stance within a more active and diverse arena. Such a comprehensive data amalgamation, analyzed through the lens of advanced computational techniques and enriched with socio-political theory, could offer groundbreaking insights. This endeavor would bridge the current knowledge gap and catalyze a more informed and impactful dialogue among policymakers, educators, and society at large, paving the way for sexual education curricula that are responsive to the needs and values of a dynamically changing populace.

5 Conclusion

This study has navigated the complex terrain of public opinion on sexual education in public schools, employing a robust dataset from the General Social Survey (GSS) that spans several decades. Despite the challenges posed by missing data in crucial years like 2020 and the shift to online survey methodology, the analysis has illuminated the influential role of political affiliations, educational levels, and generational perspectives on sexual education attitudes. The results underscore a notable trend: higher educational attainment and Democratic political leanings correlate with support for sexual education, while generational gaps reveal more conservative stances among older age groups.

The limitations of the study, including incomplete datasets and the lack of qualitative depth in multiple-choice responses, suggest avenues for richer, more nuanced future research. By integrating open-ended survey questions and employing the capabilities of Large Language Models for text analysis, future work can capture the complexities behind the statistics. The pursuit of a broader, more inclusive range of data promises to enrich the analysis, providing the multidimensional insight required to inform effective policy and educational program development.

In the end, our findings reflect not just the collective pulse on sexual education in schools but also the broader ideological and cultural currents shaping American society. This paper lays the groundwork for ongoing discussions and research that will continue to refine our understanding of public opinion and contribute to the creation of educational environments that honor the diverse needs and values of students, parents, and educators alike.

A Appendix: Supplementary Survey on Public Opinion Regarding Sexual Education in Public Schools

A.1 Introduction

This supplementary survey aims to gather nuanced opinions on sexual education in public schools, extending insights gained from the General Social Survey (GSS). Your participation is voluntary, and all responses are anonymous. This survey will be distributed in the same manner as the GSS but is designed to stand independently to gain additional information on the topic.

Thank you for taking the time to complete this survey. Please contact Wanling Ma via wanling.ma@mail.utoronto.ca if you have questions or require any further information.

Survey Link: <https://forms.gle/bLzNKqahjMHwtLf46>

A.2 Survey Questions

A.2.1 Opinions on Sexual Education

1. **Do you support the inclusion of sexual education in public school curricula?**
(Yes/No)
 - If yes, what do you believe are the most important components of sexual education?

 - If no, please explain your reasons.

A.2.2 Perceived Impact of Sexual Education

2. **How do you think sexual education in schools impacts students' understanding of sexual health and relationships?**

3. **In your opinion, does sexual education in schools contribute to safer sexual behavior among teenagers? (Yes/No)**
 - Please elaborate on your answer.

A.2.3 Content and Delivery of Sexual Education

4. **What topics do you think are critical to include in sexual education programs?**

(Multiple choice: Human anatomy, STDs/STIs, Contraception, Consent, LGBTQ+ issues, Other)

5. **At what age do you believe sexual education should begin in schools?**

(Multiple choice: Pre-school, Elementary, Middle school, High school)

6. **Who do you think is best qualified to teach sexual education in schools?**

(Multiple choice: Trained educators, Health professionals, Guest speakers from relevant organizations, Other)

A.2.4 Cultural and Political Influences

7. **Do you believe cultural or religious beliefs should influence the content of sexual education in schools?** (Yes/No)

- Please explain your view.

8. **How do you think current political climates affect the implementation of sexual education in schools?**

A.3 Conclusion

Thank you for participating in this survey. Your insights are invaluable to our research and the broader discourse on sexual education in public schools.

References

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