Democratic Marriage Rates on the Rise: Catching Up With Republicans*

An Analysis of the 2014-2021 U.S. General Social Survey Data

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*Code and data are available at: https://github.com/cthierst/marital_status_politics_gss_analysis.git

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1 Introduction

2 Data

2.1 Data Management

This paper uses the R statistical programming language (R Core Team 2022), along with several packages, tidyverse (Wickham et al. 2019), janitor (Firke 2021), here (Müller 2020), and (Wickham et al. 2022). All figures in this paper were created using the packages ggplot2 (Wickham 2016) and the tables were created using knitr (Xie 2023) and kableExtra(Zhu 2021). Combinations of figures were created using (Pedersen 2022) The color styling of graphs has been created using RColorBrewer (Neuwirth 2022).

2.2 Source

The data within this paper was extracted from the 2014, 2016, 2018 and 2021 United States General Social Survey (GSS). This survey is a series of nationally representative cross-sectional interviews that collects data on contemporary American society to explain and monitor trends in attitudes, opinions and behaviours (Davern et al. 2021). It began tracking these trends in 1972, and has primarily used in-person data collection as its method of data collection (Davern et al. 2021). In 2021, the survey moved to an address-based sampling method with a focus on web-based self-administered questionnaires (Davern et al. 2021).

2.3 Sampling

The United States General Social Survey (GSS) samples adults over the age of 18 in the United States who are not currently living in institutional housing (Davern et al. 2021). Table 1 shows the total number of responses collected by the GSS and the total number of responses used in the analysis of this paper, per year.

Table 1: Number of Responses

Year	Total # of Responses	Total # of Responses Used in Analysis
2014	2,538	2,322
2016	2,867	2,641
2018	2,348	2,143
2021	4,032	3,529

2.4 Key Features

This paper explores the estimands, does political affiliation as measured through political views and identification impact marital status' and what influence does generational cohort and sex have. This paper explores these estimands through an analysis of the sample populations described in Table 1 under "Total # of Responses Used in Analysis." Responses were removed to account for unanswered or not applicable responses. I did this to ensure the representative and completeness of all variables analyzed. Additionally, in the data cleaning process, the cohort variable was manipulated to combine respondent's birth years into their generational cohort for more coherent analysis. The variables selected for analysis can be viewed in Table 2 and their measurement levels can be viewed in Table 3. Responses were measured using Likert scales which measure respondents' opinions to questions, and multiple choice questions.

Table 2: Variable Descriptions

Variable	Variable Description
partyid	Self-described identification with a political party
polviews	Self-described placement on the political spectrum
marital	Marital status of respondent
sex	Self-described sex of respondent
cohort	Generational cohort that respondent belongs to

Table 3: Variable Measurements

Variable	Variable Measurement
partyid	Strong Democrat, Not Very Strong Democrat, Independent (Close to Democrat), Independent (Neither), Independent (Close to Republican), Not Very Strong Republican, Strong Republican
polviews	Extremely Liberal, Liberal, Slightly Liberal, Moderate, Slightly Conservative, Conservative, Extremely Conservative
marital	Married, Never Married, Separated, Divorced, Widowed
sex	Female, Male
cohort	Post-War, Boomer, Gen X, Millenial, Gen Z

2.5 Bias and Ethics

2.5.1 General Social Survey

It is important to acknowledge that observations and data from the 2014, 2016, 2018, and 2021 US General Social Survey (GSS) may have been influenced by social trends occurring in the world around participants. These could include and are not limited to the deaths of Michael Brown and Eric Garner as a result of police brutality in 2014, the presidential election in 2016, the immigration crisis in 2018, and the continuing COVID-19 pandemic in 2021. However, this is in part, part of the importance of the GSS, to track social trends. This is why I have chosen to compare four years of survey results, to gain a better perspective of these social trends with acknowledgement of the global circumstances in which they are reported under. Although it is important to note that these cannot be direct comparison as the number of those surveyed is different between years as can be seen in Table 1

One point of bias that does need to be addressed is the difference in surveying techniques. The US General Social Survey (GSS) was conducted in person in the years 2014, 2016, and 2018, however, due to the COVID-19 pandemic, it was changed to being an online survey resulting in a higher rate of non-response. The 2021 GSS controlled for this by adjusting population totals to ensure that the weighted totals closely matched the U.S. Census Bureau's estimates of sex, age, education, race, region, and ethnicity (Davern et al. 2021). Additionally, due to the survey being online, household enumeration was impossible, so households were asked to identity the adult with the most recent birthday (Davern et al. 2021). This is problematic as it may have missed some household residents who were temporarily living abroad, adult children, etc. (Davern et al. 2021). Measures were taken to control for this by conducting tests of significant to look for differences in trend estimates (Davern et al. 2021). Additionally, in the years where the survey was conducted in-person, there may have been instances of variance in how interviewers asked questions which could have led to bias in the results.

2.5.2 Marital Status and Generational Cohort

Another important point of bias to acknowledge is the effect of generational cohort on marital status. As can be seen in Figure 1, the effects of age on generational cohorts largely impacts the marital status. For example, in 2014, there are significantly more respondent's belonging to the "Post-War" cohort and no respondent's belonging to the "Gen Z" cohort. This is influential as the 2014 data is missing marital rates from the "Gen Z" cohort as they were not old enough to be surveyed, thereby distorting marital rates in that year when compared to the follow three years. Additionally, due to the young age of "Gen Z", respondents many have not reached the age where they are looking for long-term relationships resulting in very few being married and even less being divorced and widowed, as shown in Figure 1. However, it is important to include them in this analysis as they are a growing and extremely relevant cohort in demographic studies. Additionally, it is noticeable that trends in marriage between

generational cohorts are shifting as can be seen by the increase of "Never Married" respondents between cohorts each year. This is significant as it may act as a co-indicator of marital rates in the U.S.

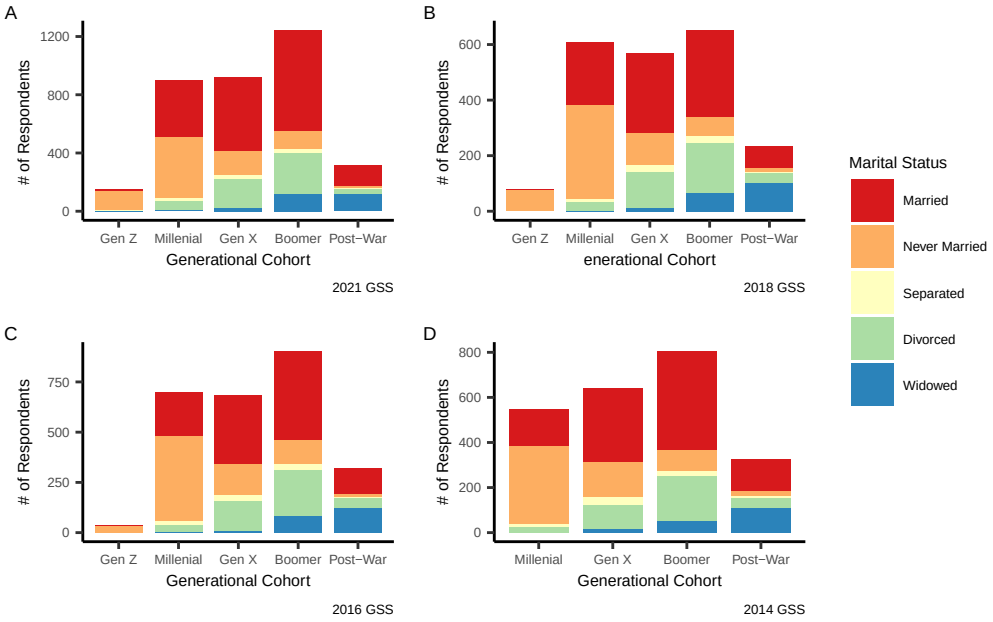

Figure 1: 2014-2021 Comparison of Respondent's Generational Cohort Against Marital Status

2.5.3 Marital Status and Sex

The last points of bias that must be acknowledged is the response rate of females versus males to the U.S. General Social Survey (GSS) and the effect of sex on marital status. As Figure 2 shows, every sample from the GSS contains more females than males. This is important as women are more likely to identify with the Democratic Party and align more closely to the left of the political spectrum, whereas men are more likely to identify with the Republican Party and align more closely with the right of the spectrum (Center for American Women and Politics 2023). Meaning that responses may lean more to the left of the political spectrum, regardless of marital status.

2.6 Marital Status and Self-Described Identification With a Political Party

When looking at Figure 3, we can see that depending on the year, there are large variations in how respondent's choose to identify with the political parties in the United States. When comparing 2014 to 2021 in Figure 3, we can observe that in this period, respondent's have

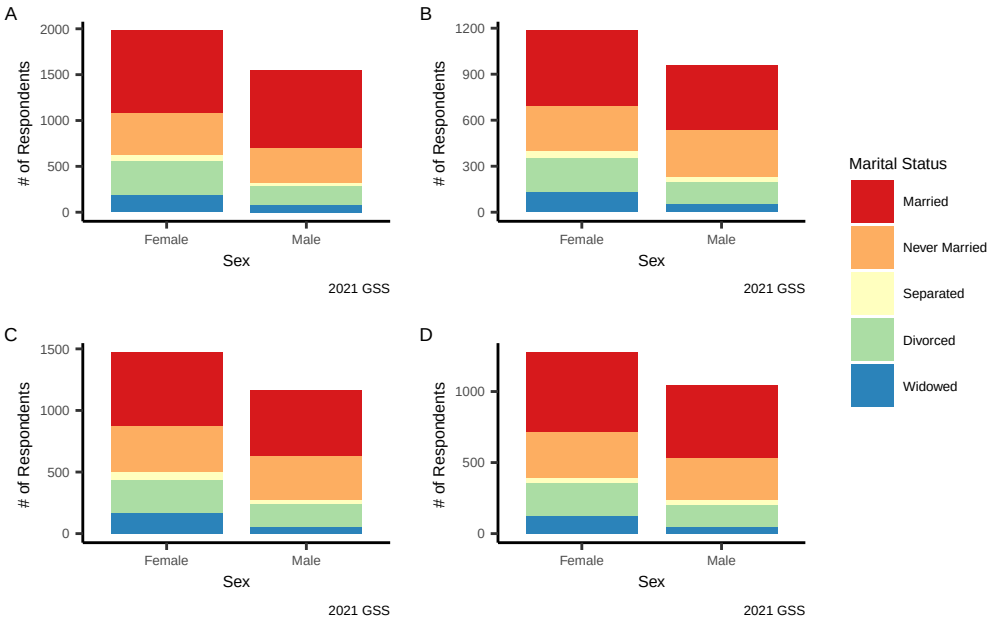

Figure 2: 2014-2021 Comparison of Respondent's Sex Against Marital Status

become more likely to make a "strong" choice in what political party they identify with as there was a more even distribution of responses in the years prior to 2021. Additionally, we can observe that those identifying with the Republican Party, indicating as "Strong Republican" and "Not Very Strong Republican", have maintained strong marriage rates in each year when compared to other marital statuses. This is in contrast to those identifying with the Democratic Party, indicating as "Strong Democrat" and "Not Very Strong Democrat" as their marriage rates seem to be less stable, increasing and decreasing based on the year, with the most significant increase occurring in 2021.

Looking at Table 4, Table 5, Table 6, and Table 7, we can see that

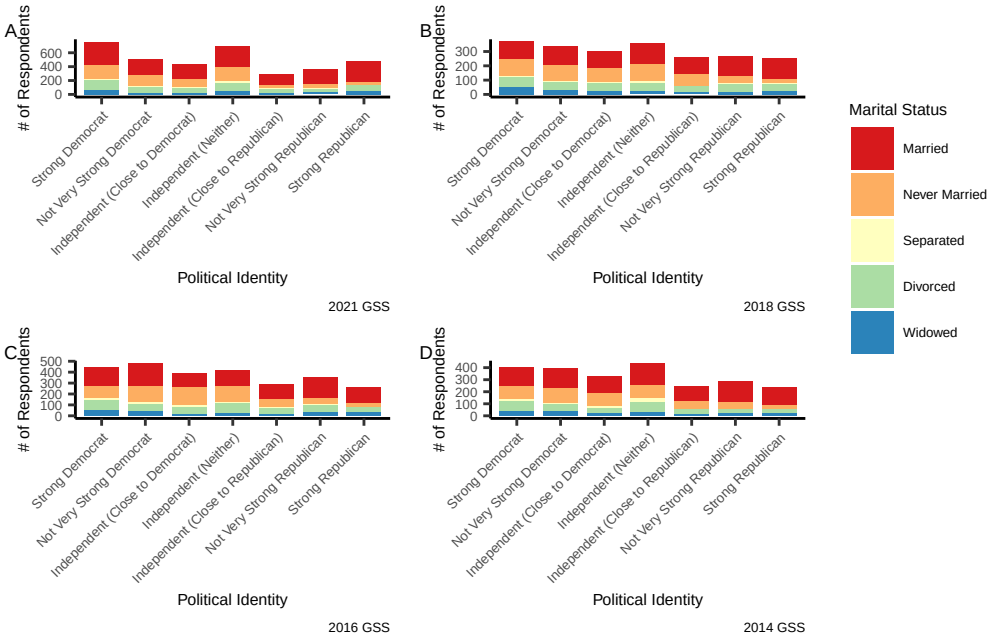

Figure 3: 2014-2021 Comparison of Respondent's Self-Described Identification With a Political Party Against Marital Status

Table 4: 2021 Respondent's Marital Status vs. Self-Described Identification with a Political Party

Political Identity	Married	Never Married	Separated	Divorced	Widowed
Strong Democrat	330	209	15	139	63
Not Very Strong Democrat	233	159	12	80	25
Independent (Close to Democrat)	216	122	13	64	22
Independent (Neither)	310	203	22	118	47
Independent (Close to Republican)	152	45	10	57	24
Not Very Strong Republican	214	62	6	51	27
Strong Republican	299	49	6	74	51

Table 5: 2018 Respondent's Marital Status vs. Self-Described Identification with a Political Party

Political Identity	Married	Never Married	Separated	Divorced	Widowed
Strong Democrat	120	116	13	68	50
Not Very Strong Democrat	138	111	8	54	30
Independent (Close to Democrat)	118	97	13	51	24
Independent (Neither)	144	118	18	56	20
Independent (Close to Republican)	113	82	5	42	14
Not Very Strong Republican	139	52	6	52	19
Strong Republican	144	31	6	49	22

Table 6: 2016 Respondent's Marital Status vs. Self-Described Identification with a Political Party

Political Identity	Married	Never Married	Separated	Divorced	Widowed
Strong Democrat	171	112	18	92	49
Not Very Strong Democrat	206	153	15	64	43
Independent (Close to Democrat)	136	164	17	64	14
Independent (Neither)	150	146	14	86	25
Independent (Close to Republican)	136	74	12	48	18
Not Very Strong Republican	189	59	9	60	36
Strong Republican	146	36	4	43	32

Table 7: 2014 Respondent's Marital Status vs. Self-Described Identification with a Political Party

Political Identity	Married	Never Married	Separated	Divorced	Widowed
Strong Democrat	157	111	15	86	37
Not Very Strong Democrat	159	125	13	59	34
Independent (Close to Democrat)	139	113	10	46	19
Independent (Neither)	179	116	25	89	27
Independent (Close to Republican)	127	60	4	40	14
Not Very Strong Republican	167	59	4	35	17
Strong Republican	150	32	4	27	23

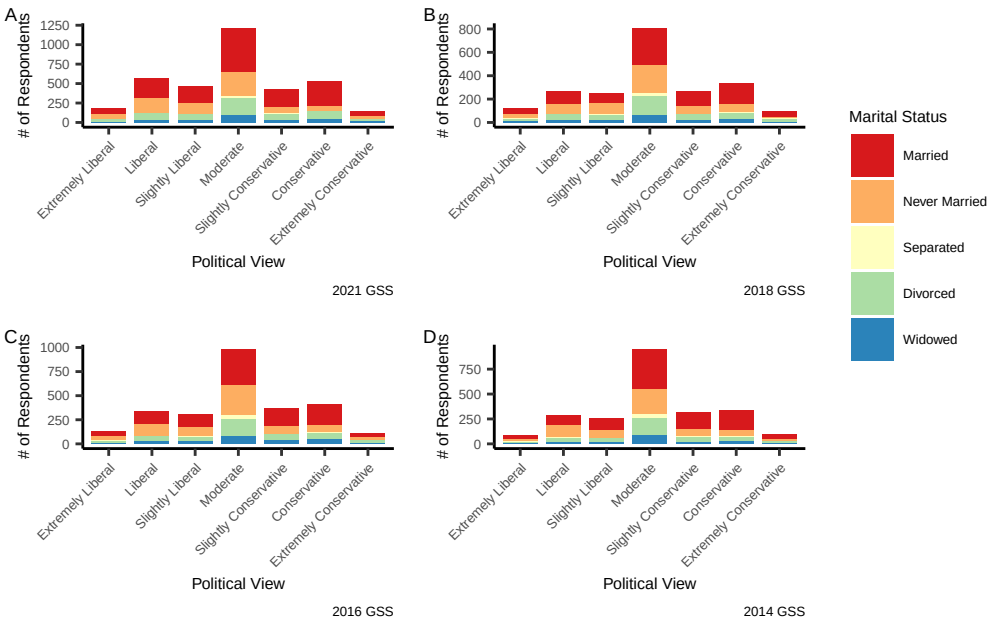

Figure 4: 2014-2021 Comparison of Respondent's Self-Described Placement on the Political Spectrum Against Respondent Marital Status

Table 8: Marital Status vs. Self-Described Placement on the Political Spectrum Against Respondent Marital Status

Political Spectrum	Married	Never Married	Separated	Divorced	Widowed
Extremely Liberal	66	70	1	31	8
Liberal	256	186	11	87	28
Slightly Liberal	221	133	9	69	31
Moderate	573	300	35	208	98
Slightly Conservative	230	76	14	73	31
Conservative	332	54	11	91	45
Extremely Conservative	76	30	3	24	18

Table 9: Marital Status vs. Self-Described Placement on the Political Spectrum Against Respondent Marital Status

Political Spectrum	Married	Never Married	Separated	Divorced	Widowed
Extremely Liberal	43	40	5	19	10
Liberal	111	86	7	43	22
Slightly Liberal	87	94	7	40	22
Moderate	318	241	27	156	66
Slightly Conservative	133	63	8	44	23
Conservative	181	66	11	49	29
Extremely Conservative	43	17	4	21	7

Table 10: Marital Status vs. Self-Described Placement the Political Spectrum Against Respondent Marital Status

Political Spectrum	Married	Never Married	Separated	Divorced	Widowed
Extremely Liberal	45	44	8	23	6
Liberal	133	123	4	57	22
Slightly Liberal	131	98	7	47	21
Moderate	370	307	50	177	76
Slightly Conservative	190	73	5	66	33
Conservative	218	74	8	62	49
Extremely Conservative	47	25	7	25	10

Table 11: Marital Status vs. Self-Described Placement the Political Spectrum Against Respondent Marital Status

Political Spectrum	Married	Never Married	Separated	Divorced	Widowed
Extremely Liberal	38	26	4	14	4
Liberal	107	112	11	44	14
Slightly Liberal	115	74	9	38	16
Moderate	404	246	39	172	87
Slightly Conservative	167	78	4	49	19
Conservative	197	60	6	49	23
Extremely Conservative	50	20	2	16	8

2.7 Marital Status and Self-Described Placement on the Political Spectrum

3 Results

4 Discussion

5 Limitations and Weaknesses

One weakness of this paper that must be acknowledged is the reliance of this analysis falling on the U.S. General Social Survey (GSS). This is a weakness as the respondent's chosen to participate in this survey change each year of the survey, making it difficult to track true marital status, and changes in individual's political identification. Additionally, due to the changes in how the GSS has been distributed over the four years analyzed in this paper, there may be missed dynamism and bias in the responses, reporting and recording of data. Additionally, no survey is perfect and response bias remains a high possibility within such large data collection samples. Additionally, the GSS does not report on sexual identity which is important to note as same-sex unions were not legalized throughout the United States until 2015, meaning that many respondent's may not have had the ability to marry in 2014 and years earlier. This could have resulted in the data being skewed towards Republicans having higher rates of marriages, despite rates of common-law marriages being perhaps equal in scale.

6 Future Research

More research on this topic should be conducted as it helps us gain a more meaningful understanding of how political identification in the United States may influence marital status. Further research into this topic should explore in-depth, questions about cohort, sex, gender-identity, and sexual preferences to gain a better understanding of American demographics. This future research will substantially influence demographic studies and American understanding of themselves.

7 Acknowledgements

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