

PRIVACY PARADOX OR PRIVACY APATHY? EXPLORING THE RELATIONSHIP BETWEEN SOCIAL MEDIA USAGE AND PUBLIC OPINION ON GOVERNMENT USAGE OF DATA COLLECTION PROGRAMS

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✳ ABSTRACT

The prominence of social media as a mechanism for global communication has raised questions regarding its integrity and security of personal information identifiers such as name, address, and location history. The rise of government surveillance programs, such as those Edward Snowden exposed in 2013, are a case study in mass collection of identifying personal information without the consent of the American public. This paper looks to determine if there is a causal relationship between social media usage and negative opinions regarding mass personal identifying information government collection programs within the United States. Using data compiled by the Pew Research Center, I found that there was no statistically significant relationship at all. This has powerful policy implications such as the normalization of the surveillance state. Further research is needed to address concerns regarding the broad variables used as part of this paper.

1 INTRODUCTION

Social media is mainly associated with the development of Facebook in 2004 and websites such as Twitter in 2006. In a recent United States Supreme Court ruling, it was argued that social media is “the modern public square” and vital for information dissemination (*Packingham v. North Carolina, 2017*). As of September 2021, a little under 50% of Americans stated that they get news regularly from sites such as Twitter. Among young people aged 18-24, social media is one of the primary mediums by which news is obtained (Walker and Matsa, 2021). Social media has provided a platform for anyone to voice their opinions, which has led to bipartisan growth in political activism, freelance journalism, and other various activities (Jurrat, 2011).

In recent years, Congressional hearings have forced social media executives to answer questions regarding breaches revealing the personal data of its users (*Facebook, social. 2018*). Public controversies have raised questions about what steps these companies use to secure users’ data. The types of data collected by social media companies can include location information, health records, text messages, and emails (Levinson-Waldman et al., 2022). In addition, questions regarding data collection have not been solely relegated to the private sector. High-profile cases such as the Edward Snowden leaks in 2013 revealed government-backed mass data collection programs. The issue has galvanized public interest in government data collection programs (Cassidy, 2013).

In this paper, I will determine if there is a connection between social media usage and concern about government collection of personal information. I hypothesize that social media usage encourages apathy regarding government collection of personal information. As mentioned previously, high-profile cases such as Snowden’s expose many citizens to the reality that the government has the tools and the influence to collect private citizens’ information without them knowing (Levinson-Waldman et al., 2022). If social media usage does indeed persuade American citizens to remain unconcerned with government collection of personal information,



those results could be indicative of broader policy implications regarding the normalization of the so-called “surveillance state” (“Defining the Surveillance,” 2013).

THE PRIVACY PARADOX: PRONE TO APATHY?

When looking at the literature surrounding social media usage and general views on privacy, multiple public opinion polls show that Americans believe they lack oversight over their own information once it is online. According to a Pew Research poll, around 91% of Americans believe they have zero control over what information social media companies collect about them in a given day (Madden and Rainie, 2015). Despite this, a separate Pew Research poll found that 90% of Americans deemed controlling what information was collected about them as “very important.” To many scholars, this is known as the “privacy paradox.” As defined by Barth and de Jong (2017), the privacy paradox explains the difference between how an individual intends to protect their data on the internet and how they actually behave online. This idea is corroborated by arguments that users of social media often-times voluntarily disclose personal information in order to develop a “self-identity” within the platform, disregarding their intentions to keep their personal information private (Wu, 2018). In practice, this means that even though individuals are against social media companies having access to their personal information, they knowingly give up such information to these same companies. In interviews, individuals state that they engage in this behavior with a sense of apathy, arguing that once information is on the internet, they have no control over it (Hargiattai and Marwick, 2016). This behavior is most commonly associated with younger individuals, primarily because they rely on social media more than their older counterparts and therefore feel as though they have no option to opt-out (Blank et al.).

GOVERNMENT MASS COLLECTION PROGRAMS: PRIVACY OVER SECURITY?

When looking specifically at American attitudes towards government collection of personal

information, there is staunch opposition. According to a Pew Research poll published shortly after the Snowden leaks, more than half of all Americans disapprove of the government’s metadata collection programs. When accounting for differences in political ideology, opposition to government surveillance remains surprisingly bipartisan with a majority of Democrats, Republicans, and Independents all in opposition to enhanced surveillance measures (Gao, 2015). When looking more specifically at data collection programs such as those enacted by the NSA after 9/11, public opposition to these types of programs is mixed (Reddick et al., 2015). Half of Americans believe the metadata collection programs are justified. However, 56% of Americans also believe there are not enough limits on the collection programs (Dimock et al., 2013).

DOES CONTEXT MATTER?

Views on privacy and government data collection are often context-dependent and can shift depending on the stated goals of the data collection program. In a survey taken during the COVID-19 crisis, most Americans stated that they would be likely to engage in contact-tracing programs monitoring who they had been in contact with for the purposes of viral transmission mapping. Americans who were in favor of the practice argued that the benefits of public health outweighed the costs to personal freedoms (McClaine, 2020). Conversely, many Americans were against private entities such as Facebook collecting their data for use in advertisements (Gramlich, 2021). It seems that in cases where vital infrastructure such as hospital capacity is at stake, individuals are much more willing to knowingly provide social media companies with their personal information. Conversely, advertisements in most cases are deemed a nuisance and individuals are therefore less willing to provide their personal information for the express purpose of advertisements. Immediately following the 9/11 attacks, many Americans called for practices such as forcing everyone to carry a national I.D. card with them (Maniam, 2021). However, a decade later, 54% of Americans

stated that curbing civil liberties would not stop terrorist attacks. In 2015, Americans called government collection of electronic data and communications “very concerning” (Maniam, 2021). In other words, it seems that context matters in the privacy vs. security debate. If personal information is being used for situations that are deemed “good,” individuals are more likely to go along with the policies in place. The opposite is true for situations deemed a nuisance or otherwise.

HYPOTHESIS

In a comparison of individuals, those who use social media are more likely to have favorable views towards government collection of personal information when compared to those who do not use social media.

3 METHODS

The dataset I used involved results from research that was conducted by the Pew Research center concerning privacy and security issues in the modern age, specifically in terms of growing reliance on social media. The survey, titled “American Trends Panel Wave 49,” was fielded online from June 3rd to June 17th, 2019, with approximately 4,272 individuals responding. Survey demographics showed that around 63% of respondents were white, 12% were black, and 15% were Hispanic. No other races were surveyed. Around 48% of respondents were male and 52% were female. In terms of age distribution for the survey, around 20% were 18-29, 33% were 30-49, 26% were 50-64, and 20% were 65 and older. Around 43% leaned Republican, while around 52% leaned Democrat. The remaining 5% did not fall into either Republican or Democrat party affiliation. All data was self-reported on an ordinal scale.

The independent variable used was titled “SNSUSER_W49.” As seen in **FIGURE 1**, the independent variable asked respondents if they used social media or not, placing the results into one of two categories. In terms of what constituted “social media usage,” any social media usage irrespective of frequency, so long as it is self-reported by the survey participant as “yes,” is flagged as “social media use.”

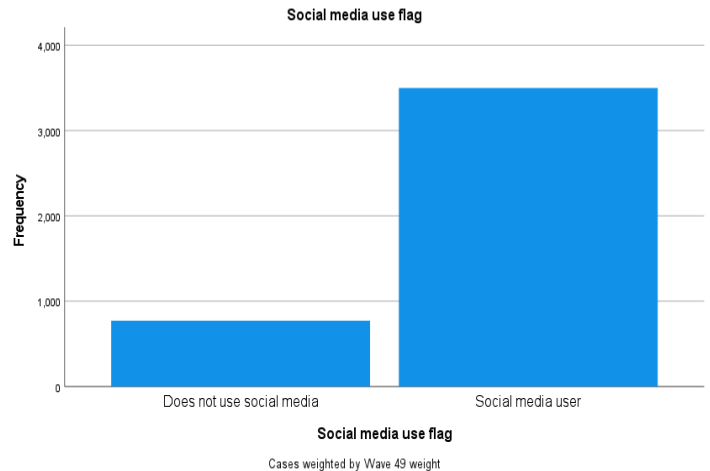


FIGURE 1: Graph of dependent variable.

Out of the 4,272 respondents recorded, 3,500 of them stated that they use social media in some form, forming 81.9% of the responses. In contrast, 18.1% of respondents stated that they do not use social media.

The dependent variable I chose was “CONCERNGOV_W49” which asked participants “How concerned are you, if at all, about how the government uses the data it collects about you?” on an ordinal scale. As seen in **FIGURE 2**, respondents selected answers ranging from “Very concerned,” “Somewhat concerned,” “Not too concerned,” and “Not at all concerned.” Of the total number of respondents who took the survey in its entirety, 2,134 responses were missing and only 2,138 responses were valid.

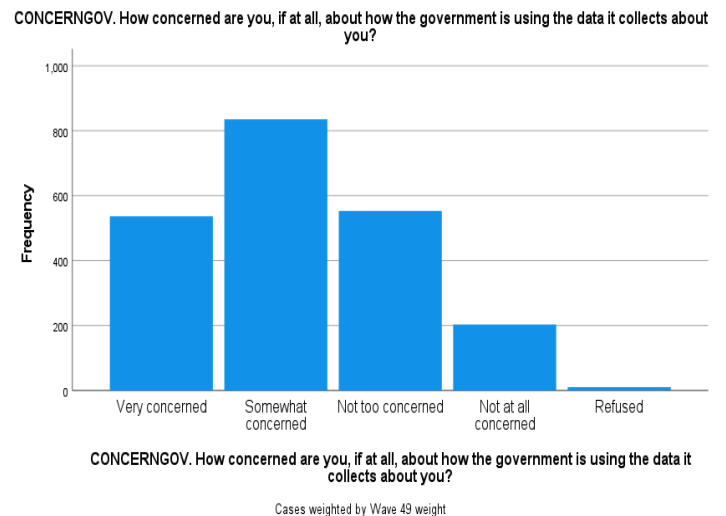


FIGURE 2: Graph of dependent variable.

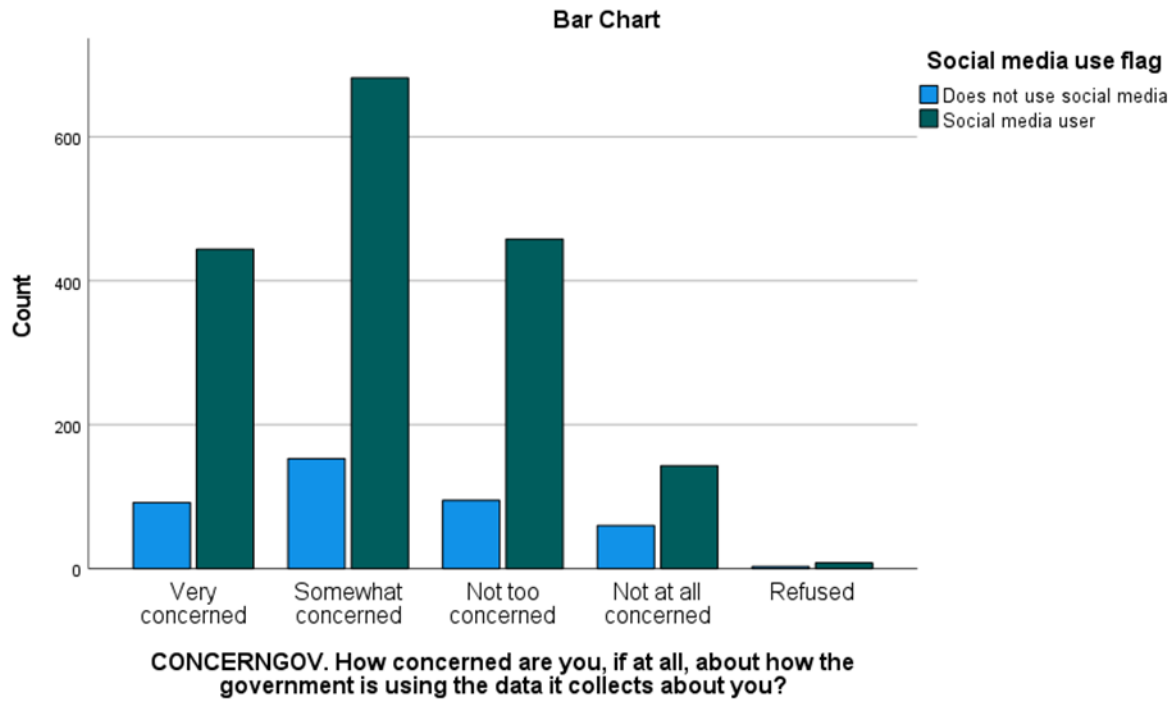


FIGURE 3: Graph of crosstab.

For the analysis, a crosstab was used along with the corresponding graph to determine a general relationship between the independent and dependent variables. The crosstab can show a general pattern which helps predict any potential statistical significance with other statistical analytic techniques. Building on that, the crosstab was then controlled for age to determine if age made a difference to the results of the original. Each individual crosstab represented a specific age range. Cramer’s V was used to determine the strength of association between the variables, along with a traditional chi-square test. Finally, a correlation and subsequent regression analysis were done to determine if the results of the dependent variable were indeed different from the independent variable.

3 ANALYSIS AND RESULTS

First, a crosstab was run as seen in FIGURE 3. Overall, I found that there was no significant difference in views concerning government data collection between social media users and non-users.

These patterns hold even when controlling for age with the controlled crosstab showing similar

results as seen in FIGURE 5. In the 18-29 age category, there is still only a 2-3% difference in opinion across all concern levels. Between those who are 30-49, the difference is again within 2-3%, except for the “not concerned at all” category with a little over 5% difference. For those who were 50 and over, there was again a difference between 2-5%. There seems to be no significant difference in opinion between those who use social media and those who don’t, even when controlling for age.

The Cramer’s V result was 0.091, suggesting a very weak association between the independent and dependent variables. A chi-squared test found that the P-Value was 0.001, suggesting I can reject the null hypothesis. The Pearson Chi-Square test resulted in 17.880, which suggests that only around 17.880% of cases would have the same connection if the null hypothesis were correct.

Finally, for my regression analysis, I found that the R-value is 0.022, the R squared value is 0.000476, and the adjusted R squared value is 0.000008. For the adjusted R squared value specifically, 0.0008% of the variation within the dependent variable is responsible for outcomes of the independent variable.



ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|------|-------------|-------|-------------------|
| 1 | Regression | 46.560 | 1 | 46.560 | 1.017 | .313 ^b |
| | Residual | 97767.899 | 2136 | 45.781 | | |
| | Total | 97814.459 | 2137 | | | |

a. Dependent Variable: CONCERNGOV. How concerned are you, if at all, about how the government is using the data it collects about you?

b. Predictors: (Constant), Social media use flag

FIGURE 4: Table of regression analysis.

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | |
|-------|-----------------------|-----------------------------|------------|---------------------------|--------|-------|---------------------------------|-------------|
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| 1 | (Constant) | 2.971 | .337 | | 8.818 | <.001 | 2.310 | 3.632 |
| | Social media use flag | -.377 | .374 | -.022 | -1.008 | .313 | -1.111 | .356 |

a. Dependent Variable: CONCERNGOV. How concerned are you, if at all, about how the government is using the data it collects about you?

FIGURE 5: Coefficient chart.

5 DISCUSSION

Based on the analysis, the results suggest that there is no statistically significant relationship between whether an individual uses social media or not and whether that is a good predictor of their views on government collection of personal information. Specifically, when looking at both the Cramer’s V and regression analysis, there is little indication that the independent variable impacts the dependent variable. While the correlation and crosstabs seemed to indicate some sort of relationship, they both ended up being too weak to conclude that there was a robust and viable relationship. Therefore, based on the evidence, it is appropriate to accept the null hypothesis.

In terms of why there seems to be no relationship between social media use and views on government collection of information, one of the reasons could be that it is accepted as normal by US citizens (Goitein, 2013). The classic argument in favor of surveillance is that if someone is not doing anything wrong, they should not be concerned about what information their government has on them.

Even with the knowledge of high-profile cases such as the Snowden leaks, it assumes that the public, at least to some extent, is okay with the practice so long as they live comfortably (Cofone, 2020). Additionally, because government collection of information includes email, phone calls, and GPS logs, whether someone uses a social media platform may not have been a strong predictor to begin with. Possibly, other factors such as political party affiliation are at play (Gao). Besides that, younger generations use social media at higher rates than older ones and often are not as worried about surveillance as older individuals, probably because they have grown up in what could be called a quasi-surveillance state in the wake of incidents such as 9/11 and view the practice with a sense of apathy (Desilver, 2013).

The previous analysis is highly speculative, and further research is needed to establish a connection. Specifically, future researchers should focus on how individuals who use different social media platforms compare. I used a single variable compiling all individuals who either use social media or do not use social media for my research. However, that could have skewed the results since there was no specificity as to whether the type of websites used impacted an individual’s views on government



information collection. For instance, people who use only Facebook might have different opinions than people who simultaneously use Facebook, Twitter, and Instagram. A future research design should account for this variation, as social media sites have gained an exponential following in recent years, giving researchers rich data pools to use.

Many of the issues present with the current findings could be due to the survey methodology used. For one, all the information compiled by the Pew Research Center was based on self-reported survey responses. In addition, the survey data based on my parameters was incomplete. Around half of the total respondents were unaccounted for in my research because they were not flagged as people who do or do not use social media. Therefore, they had to be disregarded in the statistical analysis. Overall, this is perhaps the greatest flaw in my research methodology and should be taken into account in future studies ■

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