The Association Between Internet Use and Trust

Benjamin McKinney, Quantitative Analysis Center, Wesleyan University

Introduction

- **Prevalence:** Internet use has been increasing over the past decades, with average digital media use doubling from 2011 to 2021 (Guttmann, 2023)
- **Trust in Government:** The increased accessibility of the internet through sources like 3G mobile broadband have led to significant decreases in government approval (Guriev et al., 2021)
- Frequent internet use also leads to decreased levels of government trust and compliance (Im et al., 2014)
- **Trust in Institutions and Others:** Additionally, trust in major institutions as well as trust in others has been decreasing from 1978 onwards and reached record lows in 2012 according to the GSS (Twenge et al., 2014).
- Media and social networks specifically saw an increase in trust during 2021, countering a few years of decline. However, this led to increased skepticism of government disseminated information for the Covid vaccine even though trust in vaccine providers remained relatively unchanged (Robinson et al., 2021; Williamson & Tarfa, 2022).
- **Research Gap:** While a great deal of research has identified a historical relationship between internet use and trust of government, there has not been a significant amount of modern research into internet use and interpersonal trust or trust in other major institutions.

Research Questions

1. What is the relationship between internet use and confidence in major institutions?
2. What is the relationship between internet use and confidence in others?

Results

Univariate

- Out of 4032 observations, 517 were in the top 25% of wwwhr respondents and 453 were in the bottom 25%. The remaining observations were in the middle 50% or did not respond to the wwwhr question

Bivariate

- The only bivariate model represented helpfulBinary as a function of internetUsage. Logistic regression analysis (Figure 1.) revealed high internet use significantly decreased the odds of considering others helpful by 36% (p=.004).

Multivariate

- Logistic regression demonstrated high internet use increased the odds of being afraid of walking alone nearby at night by 39%, while past (OR=.58) or current (OR=.64) marriage and being male (OR=.44) all decreased these odds (Figure 2.)
- All variables significantly correlated with considering others trustworthy decreased the odds, with health having the largest possible impact (23% per unit from 1-4), then internet Usage (39% for high) and age marginally decreasing the odds (1%) (Figure 3.)
- Linear regression highlighted confidence in institutions significantly varied by internet use (beta= -.575, p=.028) and religious practice (p=.578, p=.043) (Figure 4).
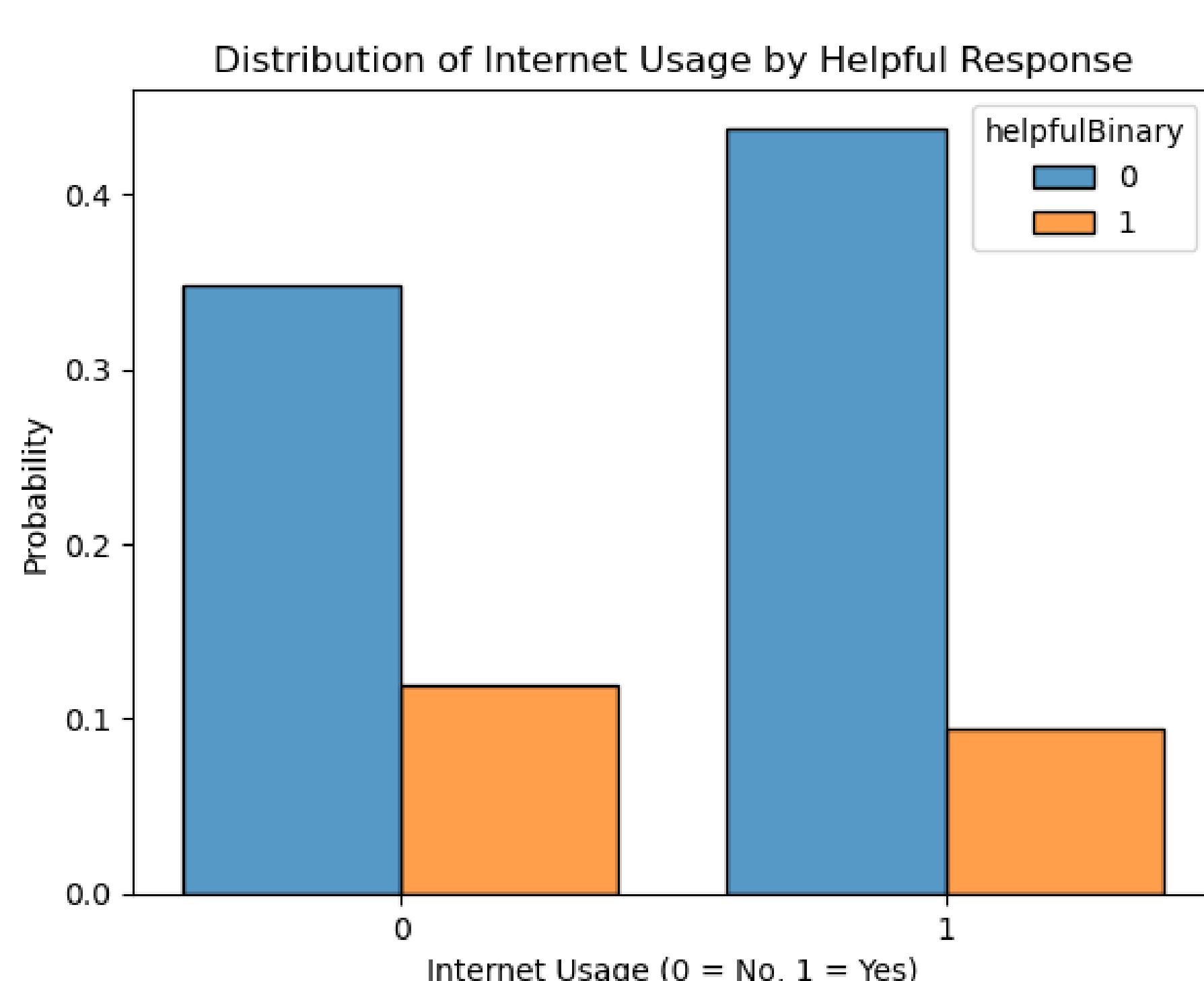
Methods

Sample: General Social Survey (GSS) for 2021

- The GSS represents **Americans 18 or older** who live in non-institutional housing at the time of the web interview. The survey received **4,032 responses** (n=4032) between December 1, 2020, and May 2, 2021. Both **English and Spanish** languages were available for the survey.

Measures

- Time spent online (**wwwhr**) was measured through how many hours an individual spent on the web including social media and streaming services.
- **InternetUsage** was created as a binary variable from wwwhr (0=bottom 25% of wwwhr, 2 hours or less, and 1=top 25%, 20 hours or more)
- **relig** is a binary (1= practice any form of religion, 0=no religious practice)
- **sex** is a binary for gender (1=male and 0=female)
- **marital** is a categorical (0=never married, 1=was married, 2=currently married)
- **age** is a quantitative (age of the individual)
- **health** is a categorical reflecting general health (1 to 4, 4=excellent)
- **life** is a categorical for "how exciting is your life?" (1=dull, 2=routine, 3=exciting)
- **satsoc** is a categorical for social satisfaction (1 to 5, 5=most satisfied)
- **educ** is a quantitative (number of years in school)
- The confidence variables are all categorical (1 to 3, 3 = most confident) for "regarding the leaders of ___ institution, how confident in them are you?"
  - Such as confinan (confidence in financial institutions) or consci (confidence in science)
- **fear** is a binary for "is there anywhere within 1 mile of your house you would be afraid of walking alone at night?" (1=yes, 0=no)
- **trustBinary/helpfulBinary/fairBinary** are binaries representing whether an individual considers others to be trustworthy, helpful, or fair (1=yes, 0=no)
  - Based on trust/helpful/fair variables where 1=no, 2=depends, 3=yes, then depends was merged into "no"
- **coninstitutions** is the sum of major institutions significantly related to internetUsage (finance, religious organizations, television, and armed forces)
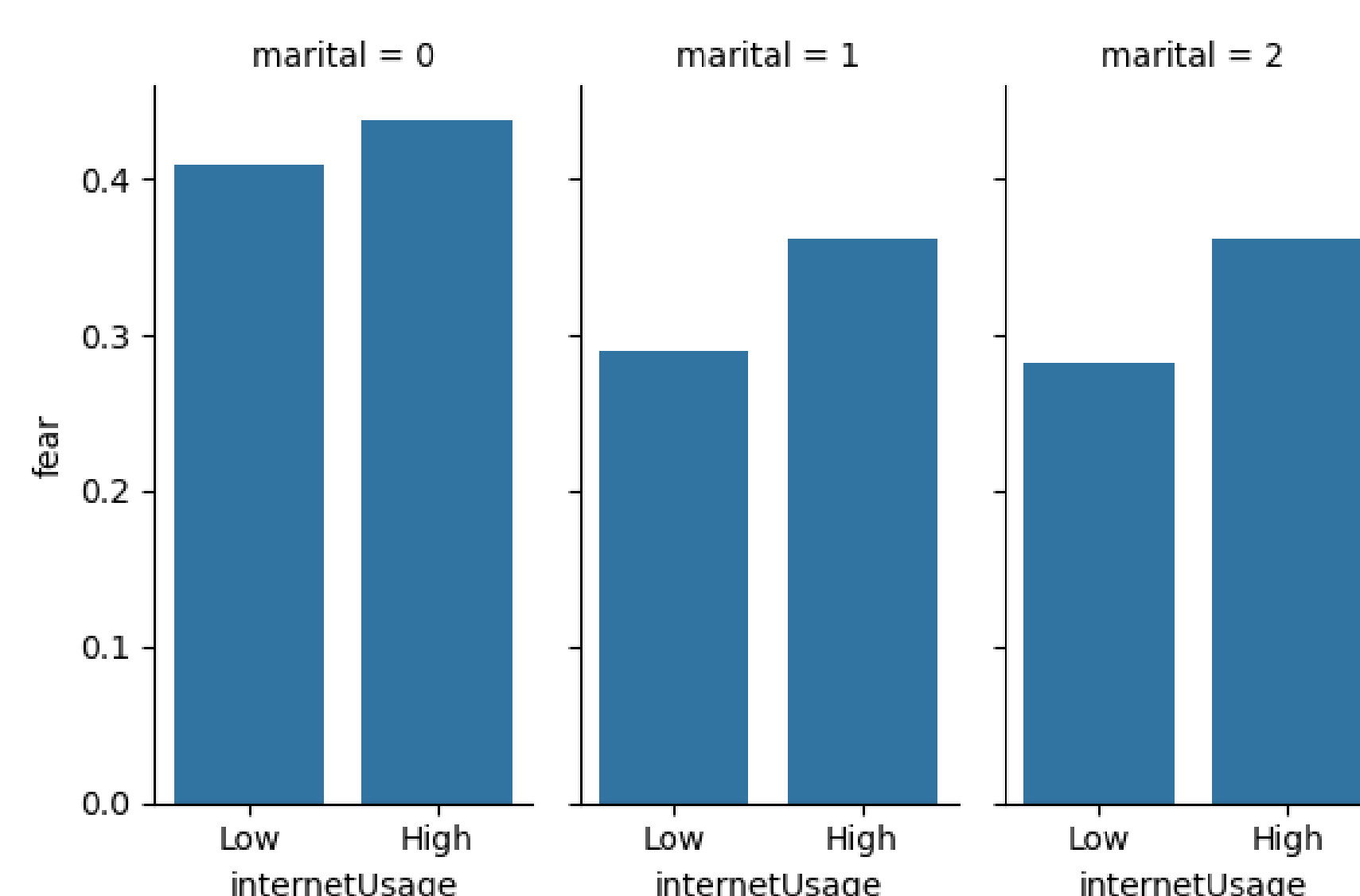
Discussion

- In all models, high internet use led to a decrease in confidence. This provides evidence for individuals who have high internet use (ie, 20 hours or more) to have significantly less confident in the institutions and individuals around them.
- While confidence in branches of the government were surveyed, none of them were significantly related to internetUsage as it was defined.
- A significant issue was discovered within the dataset, where no observations were recorded for coninstitutions when life was not zero and subset based on internetUsage observations (n=960).
- Further research is necessary to explore how different forms of digital media may impact confidence in institutions and others. Additionally, the digital space is very volatile, so current events may also significantly impact the relationship between internet use and confidence.

Figure 2. Fear of neighborhood by internet use and marital status
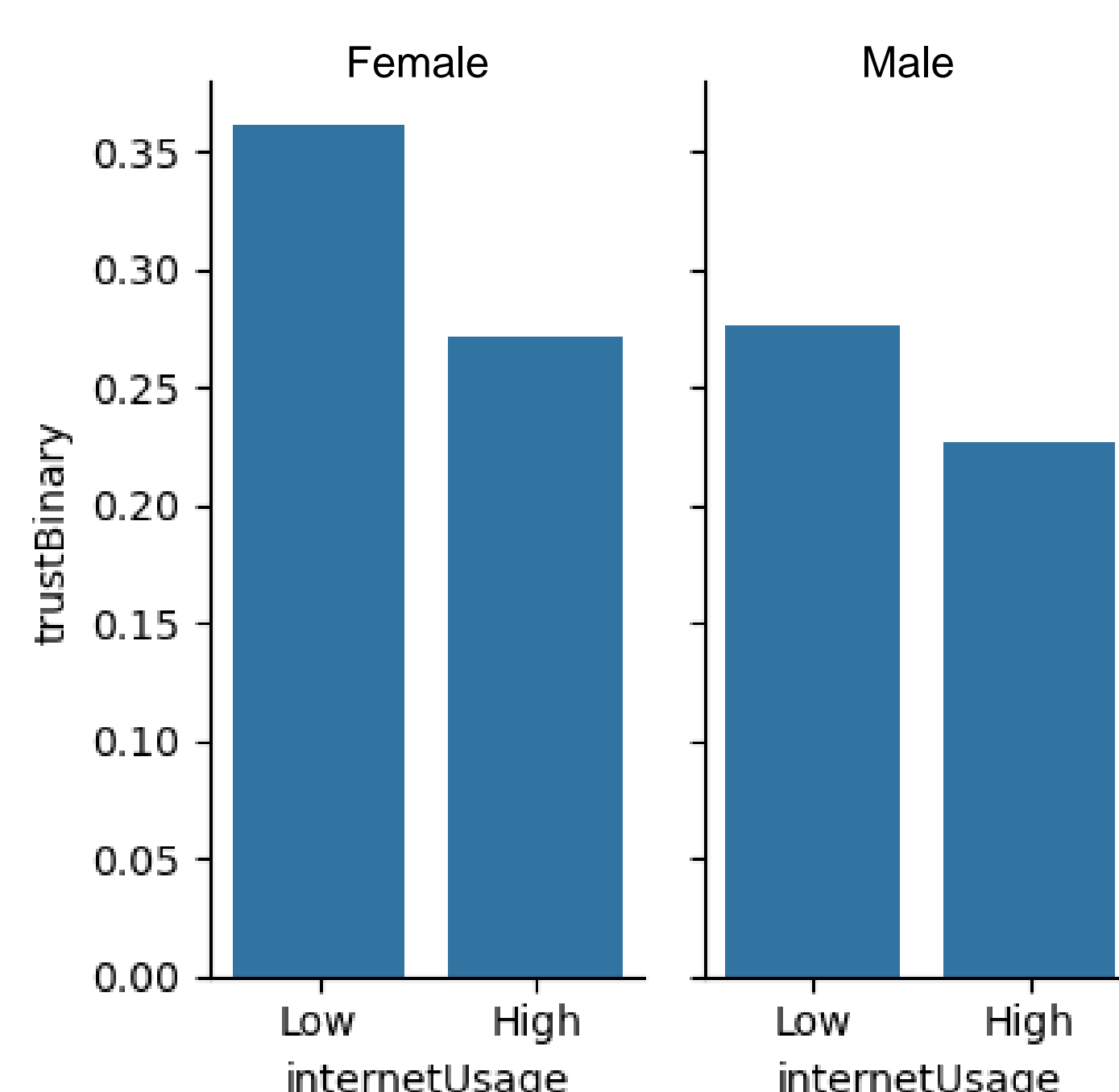
Figure 3. Considering others trustworthy by internet use and gender

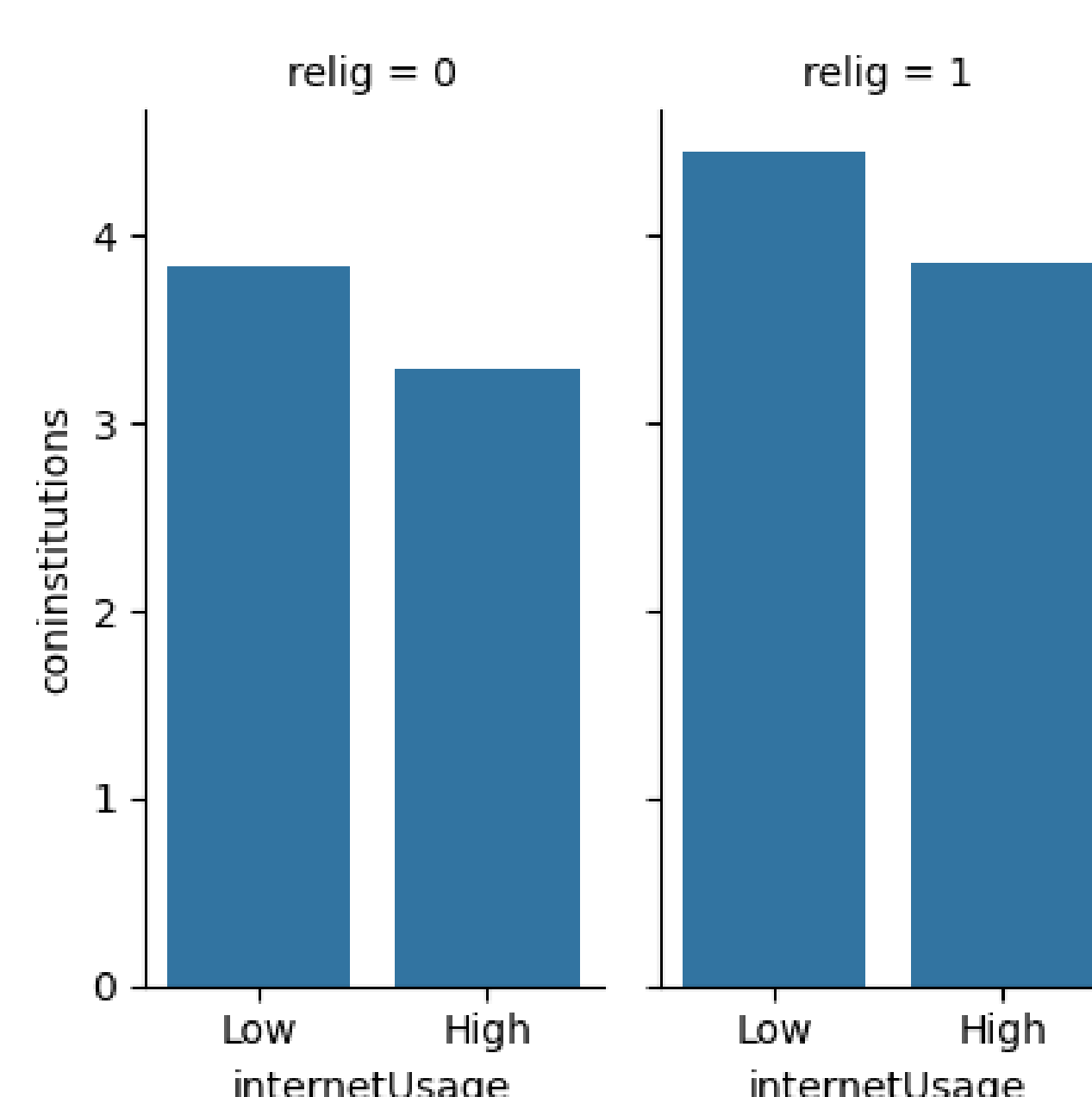Figure 1. Considering others helpful by internet use.

Figure 4. Confidence in institutions by internet usage and religion

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