



# IPSOS / REUTERS POLL DATA

Prepared by Ipsos Public Affairs

## Ipsos Poll Conducted for Reuters

Transgender Rights 07.28.2017

These are findings from an Ipsos poll conducted July 26-28, 2017 on behalf Thomson Reuters. For the survey, a sample of roughly 1,249 adults age 18+ from the continental U.S., Alaska and Hawaii was interviewed online in English. This sample includes 533 Democrats, 434 Republicans and 143 Independents.

The sample for this study was randomly drawn from Ipsos’s online panel (see link below for more info on “Access Panels and Recruitment”), partner online panel sources, and “river” sampling (see link below for more info on the Ipsos “Ampario Overview” sample method) and does not rely on a population frame in the traditional sense. Ipsos uses fixed sample targets, unique to each study, in drawing sample. After a sample has been obtained from the Ipsos panel, Ipsos calibrates respondent characteristics to be representative of the U.S. Population using standard procedures such as raking-ratio adjustments. The source of these population targets is U.S. Census 2013 American Community Survey data. The sample drawn for this study reflects fixed sample targets on demographics. Post-hoc weights were made to the population characteristics on gender, age, race/ethnicity, region, and education.

Statistical margins of error are not applicable to online polls. All sample surveys and polls may be subject to other sources of error, including, but not limited to coverage error and measurement error. Where figures do not sum to 100, this is due to the effects of rounding. The precision of Ipsos online polls is measured using a credibility interval. In this case, the poll has a credibility interval of plus or minus 3.2 percentage points for all respondents. Ipsos calculates a design effect (DEFF) for each study based on the variation of the weights, following the formula of Kish (1965). This study had a credibility interval adjusted for design effect of the following (n=1,249, DEFF=1.5, adjusted Confidence Interval=4.7).

The poll has a credibility interval of plus or minus 4.8 percentage points for Democrats, plus or minus 5.4 percentage points for Republicans and plus or minus 9.3 percentage points for Independents.

For more information about conducting research intended for public release or Ipsos’ online polling methodology, please visit our [Public Opinion Polling and Communication](#) page where you can download our brochure, see our public release protocol, or contact us.

		<u>Total</u>	<u>Democrat</u>	<u>Republican</u>	<u>Independent</u>
AB10_262 - Awareness...Announcement by President Trump banning transgender individuals from serving in the military	Yes	82%	88%	86%	75%
	No	18%	12%	14%	25%
	Total	1249	533	434	143
TM897Y16 - Have you ever heard of the term transgender?	Yes	95%	97%	97%	96%
	No	3%	3%	3%	3%
	Don't know/Refuse	1%	0%	0%	0%
	Total	1249	533	434	143
TM894Y16 - And how well would you say that you personally understand what the term 'transgender' means?	Very well	50%	53%	49%	47%
	Fairly well	39%	39%	42%	39%
	Not very well	8%	6%	6%	8%
	Not at all	2%	1%	2%	6%
	Don't know	1%	1%	1%	0%



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	Total	1249	533	434	143
TM1277Y17 - Which of the following comes closest to your opinion?	Transgender people should not be allowed to serve in the military	27%	8%	49%	32%
	Transgender people should be allowed to serve in the military	58%	83%	32%	53%
	Don't know	16%	9%	19%	15%
	Total	1249	533	434	143
TM1278Y17 - How, if at all, do you think the decision to ban transgender individuals from serving in the military will impact morale within the armed forces?	It will improve morale in the armed forces	17%	11%	29%	21%
	It will have no impact on morale	33%	29%	38%	35%
	It will hurt morale in the armed forces	32%	45%	20%	23%
	Don't know	17%	15%	13%	21%
	Total	1009	437	344	112
TM1279Y17 - How, if at all, do you think the decision to ban transgender individuals from serving in the military will impact U.S. military capabilities?	It will make our military more capable	14%	6%	25%	16%
	It will have no impact	43%	39%	52%	43%
	It will make our military less capable	22%	31%	11%	22%
	Don't Know	20%	23%	12%	19%
	Total	1009	437	344	112



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## How to Calculate Bayesian Credibility Intervals

The calculation of credibility intervals assumes that Y has a binomial distribution conditioned on the parameter  $\theta$ , i.e.,  $Y|\theta \sim \text{Bin}(n, \theta)$ , where n is the size of our sample. In this setting, Y counts the number of “yes”, or “1”, observed in the sample, so that the sample mean ( $\bar{y}$ ) is a natural estimate of the true population proportion  $\theta$ . This model is often called the likelihood function, and it is a standard concept in both the Bayesian and the Classical framework. The Bayesian <sup>1</sup> statistics combines both the prior distribution and the likelihood function to create a posterior distribution. The posterior distribution represents our opinion about which are the plausible values for  $\theta$  adjusted after observing the sample data. In reality, the posterior distribution is one’s knowledge base updated using the latest survey information. For the prior and likelihood functions specified here, the posterior distribution is also a beta distribution ( $\pi(\theta/y) \sim \beta(y+a, n-y+b)$ ), but with updated hyper-parameters.

Our credibility interval for  $\vartheta$  is based on this posterior distribution. As mentioned above, these intervals represent our belief about which are the most plausible values for  $\vartheta$  given our updated knowledge base. There are different ways to calculate these intervals based on  $\pi(\theta/y)$ . Since we want only one measure of precision for all variables in the survey, analogous to what is done within the Classical framework, we will compute the largest possible credibility interval for any observed sample. The worst case occurs when we assume that  $a=1$  and  $b=1$  and  $y=n/2$ . Using a simple approximation of the posterior by the normal distribution, the 95% credibility interval is given by, approximately:

$$\bar{y} \pm \frac{1}{\sqrt{n}}$$

For this poll, the Bayesian Credibility Interval was adjusted using standard weighting design effect  $1+L=1.3$  to account for complex weighting<sup>2</sup>

Examples of credibility intervals for different base sizes are below. Ipsos does not publish data for base sizes (sample sizes) below 100.

Sample size	Credibility intervals
2,000	2.5
1,500	2.9
1,000	3.5
750	4.1
500	5.0
350	6.0
200	7.9
100	11.2