



Ipsos / ScoutComms Poll

Veterans Issues Poll 08.17.2015

These are findings from an Ipsos poll conducted for ScoutComms from August 11-13, 2015. For the survey, a sample of 1,004 Americans ages 18+ were interviewed online. The precision of the Ipsos / ScoutComms online polls is measured using a [credibility interval](#). In this case, the poll has a credibility interval of plus or minus 3.5 percentage. For more information about credibility intervals, please see the appendix.

The data were weighted to the U.S. current population data by gender, age, education, and ethnicity. 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. Figures marked by an asterisk (*) indicate a percentage value of greater than zero but less than one half of one per cent. Where figures do not sum to 100, this is due to the effects of rounding.

VETERANS ISSUES POLL

Q1. What is your opinion of the job the U.S. government is doing to support U.S. military veterans?

Highly favorable	5%
Favorable	13%
Neutral	23%
Unfavorable	25%
Highly unfavorable	26%
No opinion/Don't know	8%
TOTAL FAVORABLE	18%
TOTAL UNFAVORABLE	51%

Q2. In what area do you think the U.S. government has the most room for improvement in its support for veterans?

Providing healthcare services	41%
Creating employment opportunities for veterans	16%
Reducing the number of homeless veterans	16%
Reducing the veteran suicide rate	9%
Providing education benefits and opportunities	6%
Other/No opinion	13%

Q3. Do you think charities and non-profit organizations are doing enough to support veterans?

Yes	23%
No	34%
I don't know/No opinion	43%

Q4. Do you think corporations are doing enough to support veterans?

Yes	13%
No	54%
I don't know/No opinion	33%

Q5. Do you think that veterans are prepared to succeed in the civilian workforce by the time they leave the military?

Yes	23%
No	48%
I don't know/No opinion	29%

How to Calculate Bayesian Credibility Intervals

The calculation of credibility intervals assumes that Y has a binomial distribution conditioned on the parameter θ , 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 θ . This model is often called the likelihood function, and it is a standard concept in both the Bayesian and the Classical framework. The Bayesian ¹ 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 θ 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 ϑ is based on this posterior distribution. As mentioned above, these intervals represent our belief about which are the most plausible values for ϑ 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 weighting²

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

¹ *Bayesian Data Analysis, Second Edition, Andrew Gelman, John B. Carlin, Hal S. Stern, Donald B. Rubin, Chapman & Hall/CRC | ISBN: 158488388X | 2003*

² *Kish, L. (1992). Weighting for unequal Pi. Journal of Official, Statistics, 8, 2, 183200.*