

Methodology

The analysis of life satisfaction presented in this post builds upon a related [Pew Research Center report](#) that examines where Americans find meaning in life. That study examined answers to an open-ended survey question, fielded as part of Pew Research Center's American Trends Panel (ATP). The survey was conducted Sept. 14 to 28, 2017, and the question asked:

We're interested in exploring what it means to live a satisfying life. Please take a moment to reflect on your life and what makes it feel worthwhile – then answer the question below as thoughtfully as you can.

What about your life do you currently find meaningful, fulfilling, or satisfying? What keeps you going, and why?

In total, 4,492 of 4,867 panelists who completed the survey (92%) answered the question. Researchers used a semi-supervised computational model to identify topics within the responses, described in more detail [here](#). This allowed the team to determine whether individual responses mentioned each of 30 particular topics. The survey also included a separate question, which asked respondents to rate their life satisfaction on a scale of zero to 10.

Researchers tested the association of particular topics with respondents' overall life satisfaction ratings using survey-weighted linear regression models that included a set of binary variables that indicated whether a respondent mentioned each of 30 topics as the outcome variables. The full list of topics is available [here](#).

The regression model controlled for the following demographic factors, as well as the response word count:

- Race/ethnicity
- Religion
- Education
- Age
- Income
- Political ideology (five-point scale)
- Ideological extremity (moderate vs. very liberal or very conservative)
- Gender
- Self-reported urbanicity of their place of residence (urban, rural, suburban)
- U.S. geographic region (West, Midwest, Northeast, South)
- Marital status
- Whether the respondent has children
- Survey language (English or Spanish)

- Logged word count

To account for potential classification error resulting from the computer-assisted topic coding approach, researchers also conducted a sensitivity analysis similar to the one used in the primary analysis of the open-ended question. Using a sample of human-coded responses as a comparison point, researchers estimated the likely number of each topic's false positives and false negatives that may have resulted from the automated coding used to measure the topics.

Researchers then conducted a series of robustness checks, in which the topic codes for a subset of responses in the dataset were modified according to each topic's false positive and false negative rates, simulating potential classification error. This regression was then re-estimated with the adjusted data, and this step was repeated 100 times. After examining the average p-values of the 30 topics included in the model across all 100 of these iterations, four topics had persistently significant positive associations with life satisfaction ratings at the 0.05 level, showing effects that are unlikely to be the result of classification error or rare (but high-weight) responses. For more details on this sensitivity analysis, read the report's [Methodology](#).