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FUNDING SCIENCE: SEARCHING FOR A NEW MEASURE OF PUBLIC OPINION ON SPACE

**Abstract**

The images of the United States' space program are enduring symbols of American excellence at home and abroad, yet despite its incredible legacy of achievements, and the preeminence of our nation's space agency, the National Aeronautics and Space Administration (NASA), we do not have quality measures by which to gauge American public opinion on funding space exploration. However, this should not imply that current research on this subject is not valid, but rather that the data used to answer the questions raised are not adequate. Most researchers investigating this question look to surveys like the General Social Survey (GSS) and others which consistently ask respondents about their opinion on funding space exploration in the context of NASA's budget. This work seeks another measure within these datasets that is able to yield better results without the issues that the current question experiences with question design and framing. In order to investigate the question this paper asks, if there is a better measure available to measure public opinion on space, a proxy variable for the traditional dependent variable must be selected.

A review of the relevant literature reveals that while it is clear the American public likes space exploration, it is also reluctant to fund it. It is not clear whether this reluctance is as a result of misconceptions about the proportion of the overall federal budget allocated to space exploration or something else entirely. In light of these considerations, the proxy dependent variable chosen from the GSS was *advfront*, which asks: "Even if it brings no immediate benefits, scientific research that advances the frontiers of knowledge is necessary and should be supported by the federal government." The reason for selecting this variable is because of its strong identification with the American values often used to advocate for funding space. Multinomial logistic regression models were used to measure effects of independent variables such as *education*, *socioeconomic status*, and *party affiliation* on a respondent's likelihood of a positive correlation with *advfront*. These analysis revealed that the majority of Americans do support government-funded scientific research. This novel finding supports that current measures about public opinion on space are inadequate new measures must be found in order to fully understand what the public thinks about funding space exploration and that it is also possible to use existing data in order to accomplish this goal.