Survey of public attitudes toward science and technology: Generally positive view

Despite much publicity indicating that the American people have become disenchanted with science and technology, a new survey conducted for the National Science Board of the National Science Foundation shows strong public approval about past achievements in these disciplines and even stronger confidence for the future.

The survey, conducted by the Opinion Research Corporation of Princeton, N.J., found that an overwhelming 70 percent of the public feel that science and technology have changed their lives for the better. As a profession, scientists share a prestige second only to that of physicians—ministers were ranked third; engineers, fourth.

Though the public sees both harm and good coming from the impact of science and technology on society, 54 percent believe the good outweighs the harm and only 4 percent believe the harm outweighs the good. Among the beneficial effects cited were improvements in medicine, space research, atomic research and efforts to improve the environment. Persons believing science and technology do more harm than good most often cited a lack of concern for the environment and overemphasis on the space program as their cause for concern.

The public also has high expectations that science and technology will, in the future, help solve many of today's problems. One-third believe that "most" problems can thus be solved; an additional 47 percent believe that science and technology can help solve at least "some" of the problems. Toward this goal, the public would most like tax funds for science to be used to improve health care, reduce pollution, fight crime, prevent drug addiction and improve education. Despite the apparent popularity of the space program, 42 percent of the people surveyed said they would "least" like more tax money spent on future space exploration. Development and improvement of weaponry also ranked low on the priority scale.

"On the whole," the report concludes, "the public attitudes appear to reflect more confidence in the potential of science and technology than satisfaction with its present applications."

The personal-interview survey was conducted among 2,209 adults, using sampling techniques that permit the results to be projected to the U.S. population as a whole.

Responses varied with income, age and social background. Middle-aged, high-income, college-educated persons felt the most positive about science. Young respondents tended to be relatively negative about past contributions of science and technology but relatively positive in their hopes for the future. Older respondents were relatively negative about both the past and future.

The most dramatic distinction between the responses of various groups came in the comparison of the attitudes of whites to non-whites. Of individuals expressing an opinion only 3 percent of whites believe science does more harm than good, but 11 percent of nonwhites hold that opinion.

Roger W. Heyns, vice chairman of the National Science Board and president of the American Council on Education, told SCIENCE News that the survey had been conducted in order to provide a baseline for future studies into the effects of science and technology on citizens' daily lives, given the importance of public opinion in making science policy decisions. How well informed that opinion is, he said, depends on the particular field of science or technology in question, with public interest and knowledge running relatively high for health sciences and biology, but relatively low for social science.

Asked whether the survey results had surprised board members, having come in the face of much speculation that the public was disenchanted with science, Heyns replied: "It was no surprise for me, anyway. Perhaps some of my colleagues have swallowed these reports more than I have."

The survey of public attitudes toward science and technology appears in *Science Indicators*, the annual report of the National Science Board, issued to the President and Congress this week.

Do you Feel That Science and Technology Have Changed Life for the Better or for the Worse?

Response	Percent	Percent of those having an opinion
Better	70	77
Worse	8	9
Both	11	12
No effect	2	2
No opinion	9	_

Which One of These Items Best Describe Your General Reaction to Science and Technology?

Response	Percent	Percent of those having an opinion
Satisfaction or hope	49	58
Excitement or wonder .	23	27
Fear or alarm Indifference or lack	6	7
of interest	6	7
No opinion,	10	_

Beneficial Contributions of Science and Technology (Cited by Group Responding "More Good than Harm")

Responses	Percent
Improvements in medicine/medical	
research	54
Space research/moon trip	12
Atomic research/nuclear science	5
Efforts to improve the environment	5
Development of TV, computers, etc	3
Improved methods of transportation	3
Agriculture	2
Food research/processing	2
Don't know	4

Harmful Activities of Science and Technology (Cited by Group Responding "More Harm than Good")

Responses	Percent
Lack of concern for the environment	27
Space program/moon trips	16
Development of weapons for war	9
Destruction of natural resources	2
Development of harmful medicines	2
Harmful drugs (development and	
publicity)	1
Don't know	23

Do You Feel That Science and Technology Change Things Too Fast, Too Slowly, or Just About Right?

Response	Percent	Percent of those having an opinion
About right	51	57
Too fast	22	25
Too slowly	16	18
No opinion	11	_

Source: "Science Indicators," report of National Science Board. Survey conducted by Opinion Research Corp., Princeton, N.J.

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