

Parallel Session 27: Cultural differences in public understanding of sciences

PUBLIC PERCEPTION OF SCIENCE IN EASTERN AND CENTRAL EUROPE

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1

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Abstract:

The presentation will outline the key findings from the first major European Commission survey (so-called Eurobarometers) on public perception of science ever conducted in the 10 new European Union's Member States (Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia), plus Bulgaria, Romania and Turkey. Sample questions were fielded in November 2002 to a total of 12,247 nationals in the 13 countries.

Key words: public opinion, science and technology, Eastern and Central Europe

Information, interest, knowledge

People in the 13 countries do not only feel they are not well informed about science, but indeed, there is a surprising lack of fundamental scientific knowledge in both parts of Europe. Europeans often consider themselves poorly informed about science and technology (so state two-thirds of them), although 45.3% declare that they are interested in this subject.

In the Eastern and Central Europe, television plays an even more important role than it does in the current Member States in informing the public about developments in science and technology. Citizens in the 13 countries prefer the other "passive" information dissemination method — e.g. they prefer radio over newspapers when they are looking for news and information related to science and technology.

Biology, physics, mathematics, and astronomy are accepted by most people as sciences, while about three in 10 people in Eastern and Central Europe do not consider social sciences and psychology "fairly scientific". Ironically, even astrology is rated higher on the CC-13 level than history, economics, or sociology.

Values, science, and technology

Most people agree that science is good and useful (Fig. 1). Many even think it's omnipotent. It is also true that the more people know scientific fundamentals, the more likely they are to generally believe that science will help to improve our world.

Combating diseases, improving daily life, and interest at work are still broadly attributed to — and expected from — scientific progress. On the other hand, there is great reservation regarding science and technology as a panacea for all problems. Still, the overall image of science (that it has more positive than negative effects) finds favour in the 13 countries.

The morality of science

Most people throughout Europe (a bit more in the 15 Member States than in the 13 countries) believe that science is value neutral in the sense that there are no evil inventions — only the application of a certain scientific finding can be good or bad.

Still, scientists are held responsible for the misuse of their discoveries by almost half of the respondents in the new Member States. Consequently, the overwhelming majority in both parts of Europe agrees that scientists should be regulated by ethical standards that can be enforced by the authorities.

While people in the 15 Member States are completely divided over the question of whether or not to allow scientists to conduct experiments "on animals like dogs and monkeys" (45% agree with this proposition and 41% disapprove of the idea); the overwhelming majority in Eastern and Central Europe supports (63% vs. 22%) these experiments if they target human health problems.

Food based on GMOs

Attitudes are similar in the two parts of Europe; people first of all want to retain the right to choose between natural produce and foodstuff based on GMOs, which in other words means that the European public expects clear indication of GMO-basis on the packaging of food in supermarkets or in the menus of restaurants.

This is an indication of the general attitude of the public that can be best described as "cautious". Eighty percent of all teenagers and adults in the 13 countries await more information before consuming genetically modified food, and about the same proportion feel that such food should only be introduced if it is scientifically proven not to be a health hazard.

The scientific profession

Both in the 15 Member States and the 13 countries, people have the

highest regard for those professions that have technological or scientific relevance. Medical doctors have the highest prestige rating in both regions. Scientists come in at second place, followed by engineers.

The scientific vocational situation

People in Eastern and Central Europe are not sure if there is a scientific vocational crisis in their countries or not.

But if there is one, certainly one of the most important reasons for a declining interest in scientific careers is attributed to the labour market in the new Member States. Most people think that mediocre career prospects and low salaries turn people away from pursuing scientific studies and careers.

About two-thirds of Europeans support the idea of active public policies to encourage scientific careers: 60% on the EU-15 level and 67% in the 13 countries would like "the authorities to resolve this situation".

European scientific research

Eastern and Central Europe' citizens are quite satisfied with the level of activity the European Union displays in the area of scientific research; their expectations and perception are relatively close to each other in this respect.

Certainly, people in the 13 countries believe that research conducted at the European Union level will be more and more important (62% of the citizens in the new Member States agree) at the expense of national research.

Clearly, people in both parts of Europe feel an important remedy for the scientific inferiority of Europe is the closer cooperation between European scientists (more in the 13 countries) and European countries (more in the EU).

On average, six in 10 citizens in Eastern and Central Europe (59%) believe that the enlargement will bring mutual benefits for all: at the end of the process, both the current Member States and the accessing countries will possess an enhanced scientific potential.

Figure 1



