

VA Report 2003:4

# How Researchers View Public and Science, 2003 – interview survey





## Foreword

The future will be built on knowledge and learning. Science generates new knowledge. But knowledge will not become active without gaining the support of ordinary people, in their wishes, thoughts, ideas and feelings. To ensure an active commitment to knowledge among a broad public, the Swedish non-profit association Vetenskap och Allmänhet (Public and Science) was established.

Vetenskap & Allmänhet, or VA, is aimed at promoting dialogue, openness and understanding between the public – especially the young – and researchers. The association works to achieve a dialogue on concrete issues that people care about: new mechanisms of discourse in people's own arenas. So what do the presumptive participants in this dialogue think? To examine this issue, VA has commissioned a number of studies.

VA has engaged Sweden's Temo organisation to carry out an interview survey on how researchers view Vetenskap & Allmänhet, and their perception of how the public views sciences and scientists. The questions were prepared by VA and its reference group for public opinion surveys - Björn Fjæstad, Lennart Weibull, Lena Wollin and Ingvar Isfeldt - in consultation with Arne Modig, Ph.D., of Temo. The survey was carried out during the period October 7-22, 2003 by means of more than four hundred telephone interviews with the respondents, about one fourth each belonging to the following categories: full professors, associate professors/lecturers/research assistants, postgraduate students and researchers at companies. People at twenty different institutions of higher learning in various scientific fields were interviewed. The results of the survey are presented in this publication, *VA Report 2003:4, **How Researchers View Public and Science***.

Readers are welcome to quote this survey, provided that they cite VA as the source. This and other VA studies may also be downloaded from [www.v-a.se](http://www.v-a.se)

It is the hope of VA that the intriguing results of this survey will provide guidance and ideas for many programmes aimed at strengthening the dialogue between researchers and the public and will help create a broader commitment to knowledge.

Vetenskap & Allmänhet, VA, November 2003

Camilla Modéer  
Secretary General

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Utgivare: Vetenskap & Allmänhet, VA  
Box 5073, 102 42 Stockholm  
Telefon: 08-791 29 00  
Fax: 08-611 56 23  
E-post: [info@v-a.se](mailto:info@v-a.se)  
Webbplats: [www.v-a.se](http://www.v-a.se)

# Contents

1. Summary	<b>7</b>
2. Presentation of results	<b>11</b>
3. Who thinks what? Differences among various categories of researchers	<b>23</b>
4. A comparison between how researchers and the public view research	<b>33</b>



# 1. Summary







- Many researchers doubt that the public is interested in research...
  - Only half of researchers believe that people in general think it is important to fund research and...
  - ...only half of researchers believe that people in general are interested in research in their subject.
- ...but in spite of this, they feel that the public trusts researchers.
  - Only about 5% of researchers believe that people in general have little trust in researchers.
- Researchers value a dialogue with the public...
  - Nine out of 10 researchers think it is both interesting and stimulating to have a dialogue with the public. Eight out of 10 also think that a dialogue with the public is an obligation of every researcher and that it provides new perspectives on their own research.
- ...but this dialogue is often not visible
  - Only 36% of the respondents have told about or had a dialogue about their research with people from the public more than 10 times during the past year.
- Researchers think that research on efficient and environmentally friendly energy sources is important
  - A full nine out of 10 researchers think that the Swedish government should fund research concerning efficient, environmentally friendly energy sources. This is as large as their positive response when it comes to funding such fields as cancer research.



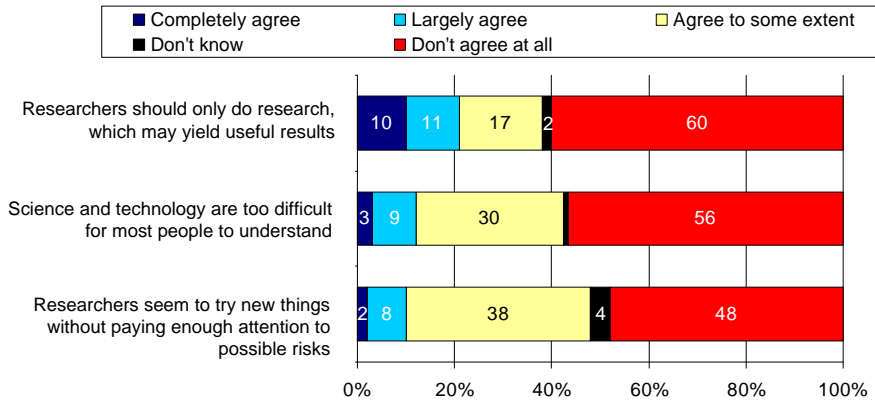
## **2. Presentation of results**





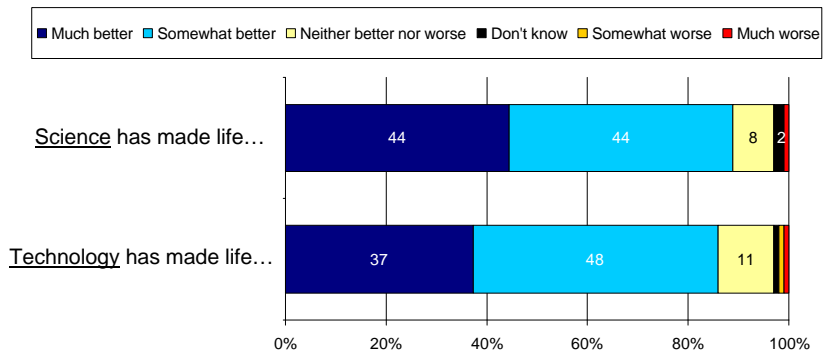
## Statements about researchers and science

Question: I will now read out loud some statements that other people have made about researchers. Can you say whether you completely agree...?



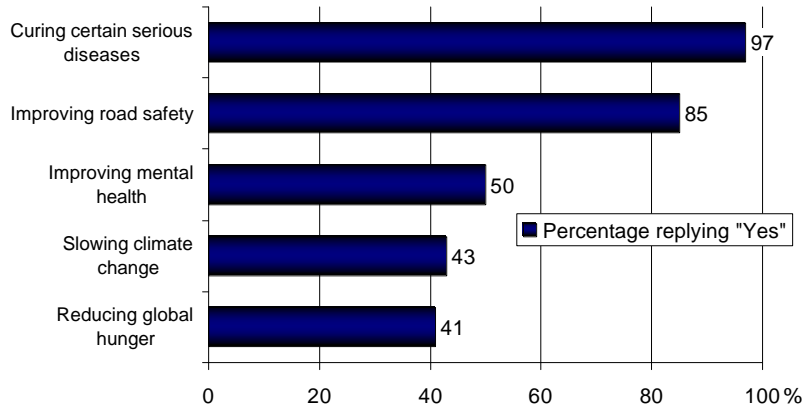
## Trust in science and technology

Question: Do you feel that science and technology over the past 10-20 years have made life better or worse for us ordinary people? Would you say it has made life...?



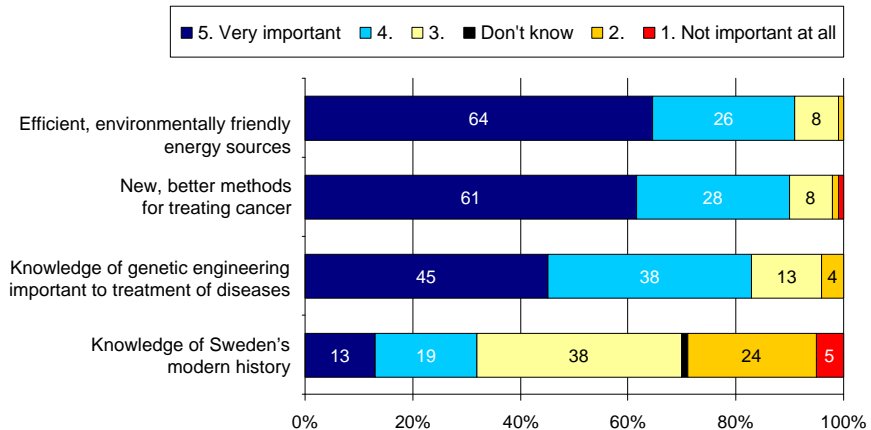
## What problems can research help to solve?

Question: Do you believe that research has a good chance to help solving the following problems within 10 years?



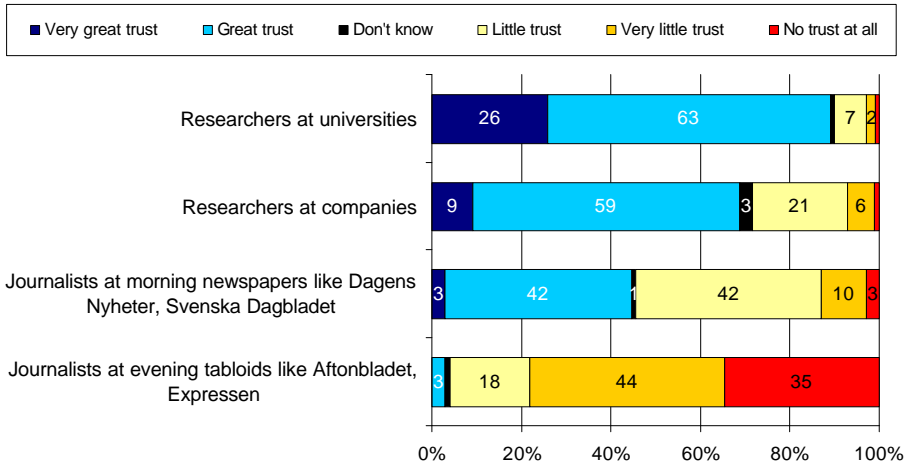
## Research fields Sweden should fund

Question: I will now list some fields of research. How important do you feel it is for the Swedish government to fund research in these fields? FIVE-POINT SCALE FROM 5=VERY IMPORTANT TO 1=NOT IMPORTANT AT ALL



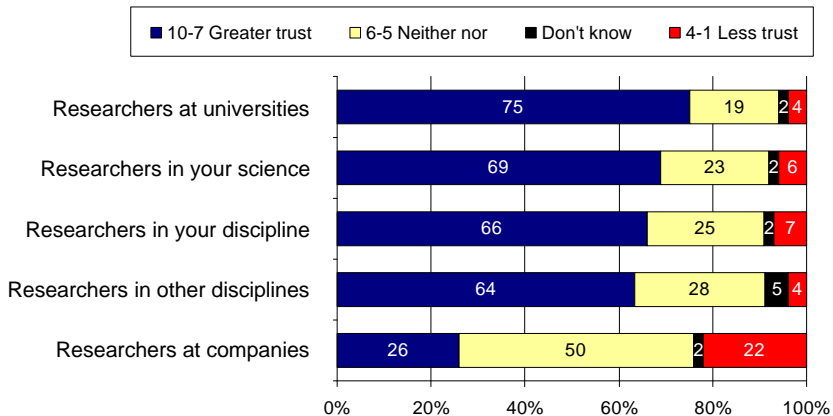
## How well researchers trust researchers and journalists

Question: How well do you trust the following...?



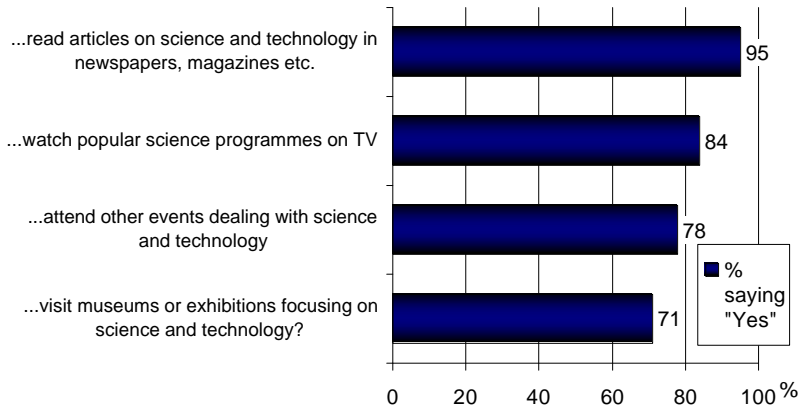
## Researchers on how well the public trusts researchers

Question: How well do you believe people in general trust researchers? Use a scale of 1-10 where 1 = No trust at all and 10 = Very great trust.



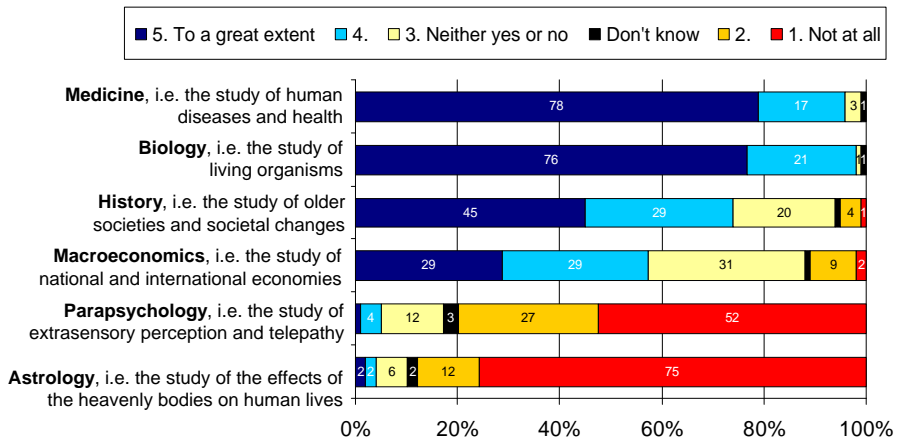
## How does one obtain information about science and technology?

Question: Do you usually...?



## What fields are scientific?

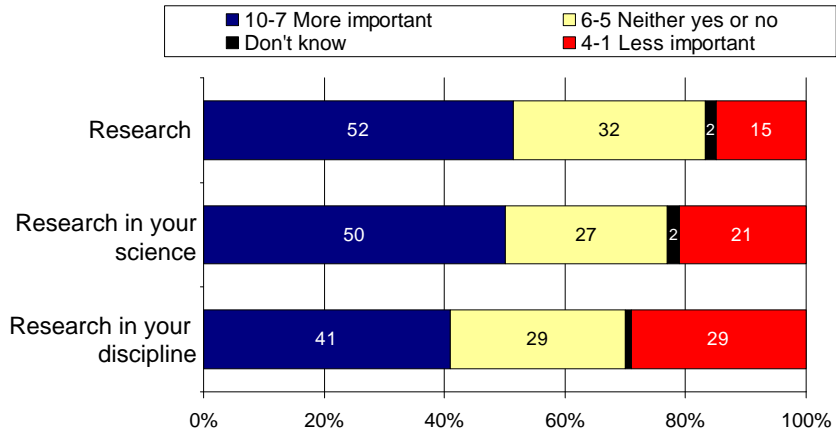
Question: To what extent do you regard the following fields as scientific?





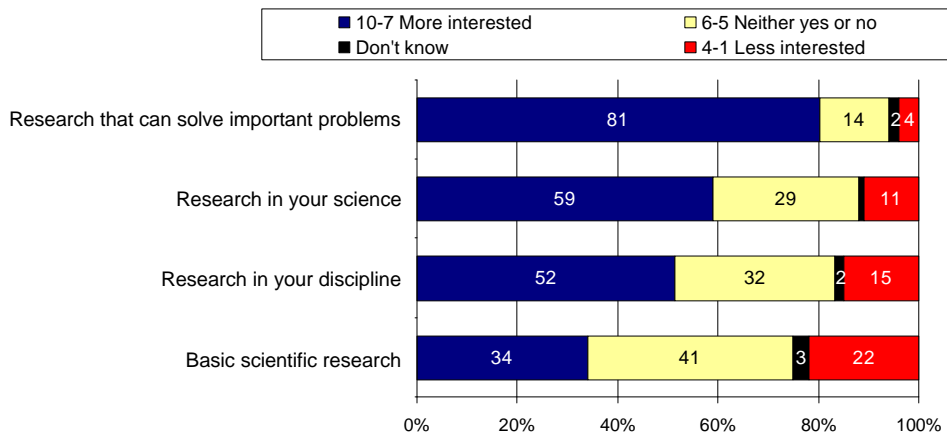
## Researchers on how the public views the funding of research

Question: How important do you believe people in general think it is to fund...?  
Use a scale of 1-10 where 1=not at all important and 10=very important.



## Researchers on how interested the public is in different kinds of research

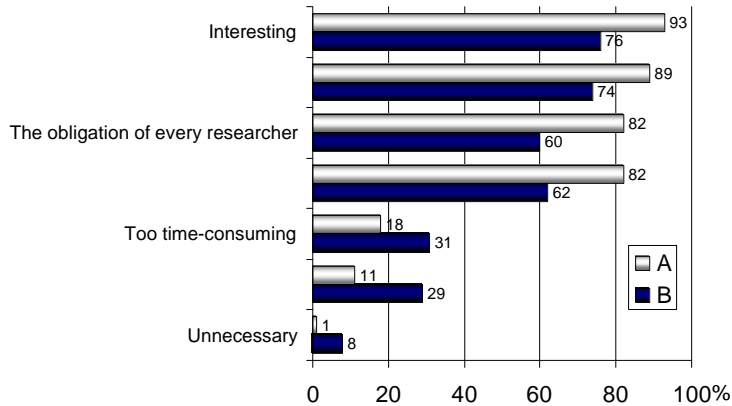
Question: How interested do you believe people in general are in different kinds of research? Use a scale of 1-10 where 1 = No interest at all and 10 = Very great interest.



## Researchers on their own and others' attitude towards dialogue with the public

Question A: Do you regard a dialogue with the public as...?

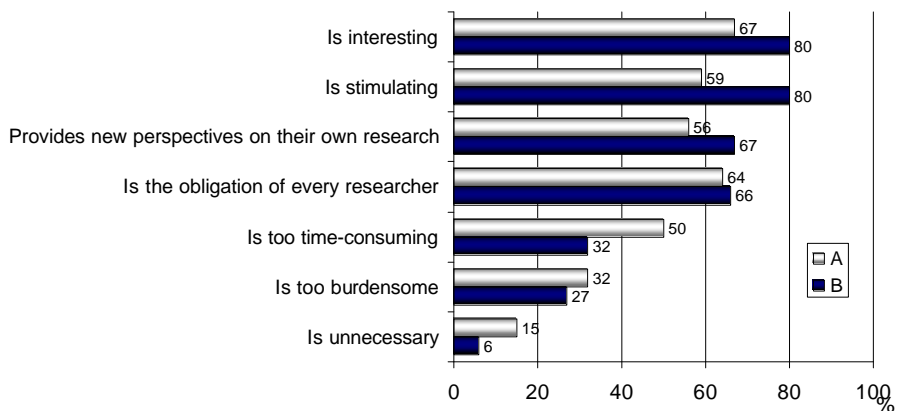
Question B: Do you believe that other researchers in other scientific fields than your own regard a dialogue with the public as...?



## Younger/older researchers on the attitude of others toward dialogue with the public

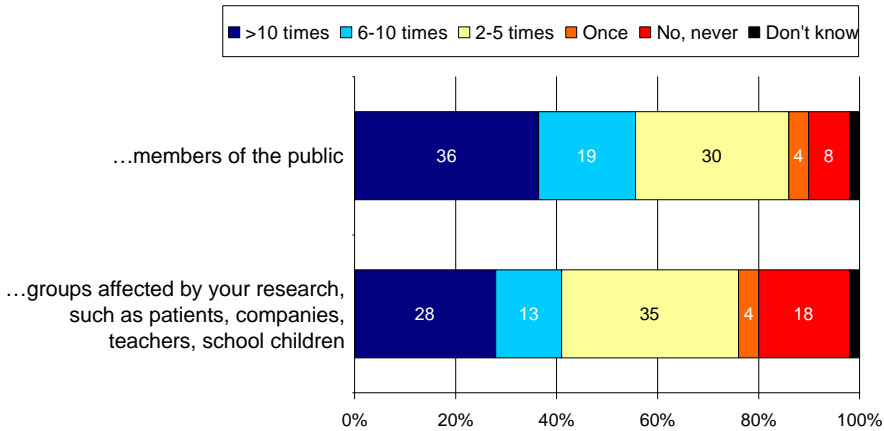
Question A: Do you believe that older researchers feel that dialogue with the public...?

Question B: Do you believe that younger researchers feel that dialogue with the public...?



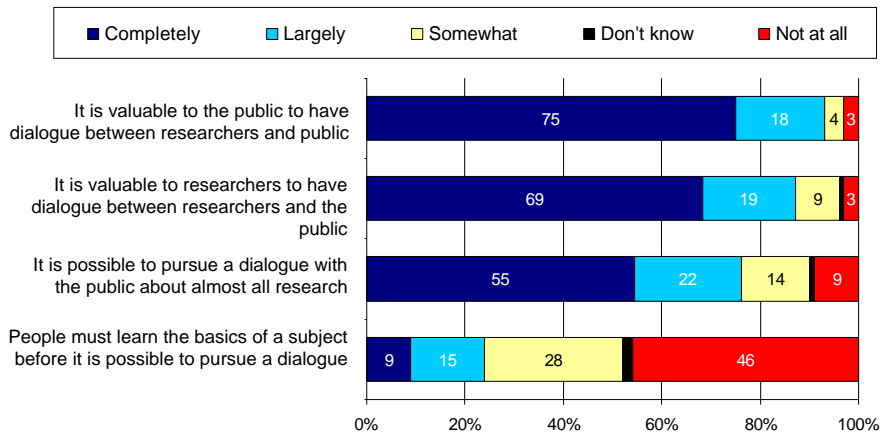
## How many researchers talk with others about their research?

Question: In the past year, have you pursued a dialogue about your research with...? If so, about how many times in the past year?



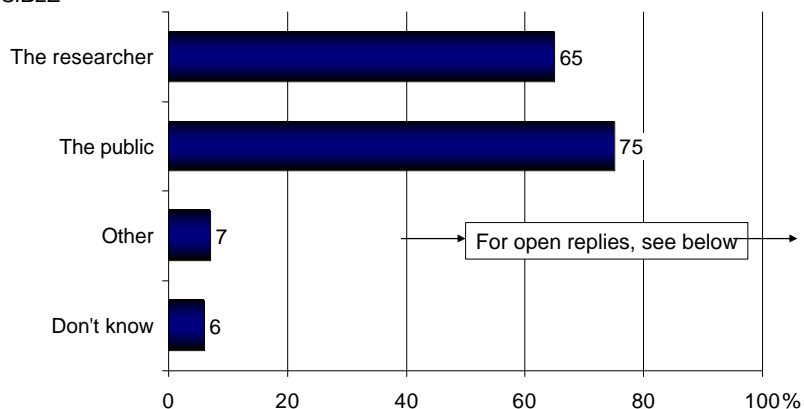
## Importance of a dialogue between researchers and the public?

Question: Do you agree completely, largely, somewhat or not at all with the following statement?



## Who should decide the topic of the dialogue? The researcher or the public?

Question: Who do you feel should play a major role in deciding what the dialogue should be about? Is it the researcher, the public or someone else? *MORE THAN ONE REPLY IS POSSIBLE*

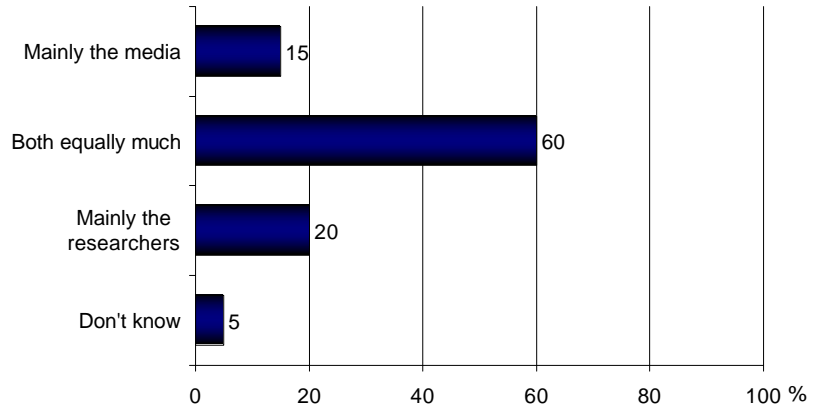


### Open replies (see above)

- In the form of co-ordination by representatives of universities, perhaps science journalists.
- Some group that take the initiative in selecting the topic.
- Catalysts that are capable of translating and buffering between the public and researchers.
- Someone impartial.
- Universities that organise the dialogue.
- Research financiers.
- Opinion moulders, media.
- Journalists and politicians are good at this.
- Important that it is a mutual dialogue, embracing researchers, the public and politicians.
- It depends on the issue.
- The organisation commissioning the research: government, companies etc.
- Research grant providers.
- Politicians.
- Anyone.
- An independent group.
- Both, or a third party.
- Journalists.
- Representatives of both.
- Public entities, companies, agencies.
- Public sector representatives, politicians and agency officials.
- Both the public and researchers.
- The public sector.
- Interested parties.
- Depends entirely on what context.
- All affected parties.
- Those that finance the research.

## Who should handle the dialogue, researchers or the media?

Question: Do you feel that the media should handle the dialogue with researchers on scientific issues, i.e. by having journalists interview researchers etc., or do you feel that researchers themselves should handle the dialogue with the public?





### **3. Differences among categories of researchers**





## Differences among various sub-categories

- This chapter compares various sub-categories with each other. These sub-categories are:
  - Male researchers and female researchers
  - Researchers in large cities and researchers in other cities
  - Four different categories of researchers: full professors, associate professors etc., post-graduate students and researchers at companies
  - Researchers in different sciences
  - Research teams by size
  - Various categories of universities
- Importance/explanatory value of sub-groups:
  - The largest differences are when comparing different sciences. The differences are clearest when it comes to their view of the public's interest and level of trust in research.
  - Certain differences (ordinarily in the same area as above) also exist when comparing various categories of researchers (professors, associate professors etc.) and comparing various categories of universities
  - Whether a researcher is a woman or a man, works in a large city or other cities or how large the research team is, however, has little explanatory value.

## Differences among various sub-categories – gender and geography

- Male and female researchers – different views of the public's level of trust
  - Men
    - More often believe that the general public trusts researchers.
    - Watch popular science programs on TV more often.
  - Women...
    - Believe less often that the general public trusts researchers.
    - More often think that a dialogue with the general public provides new perspectives on their own research.
    - Have a lower level of trust in researchers at companies.
    - More often feel that various fields are scientific, such as astrology, history and parapsychology.
- Large cities compared to other cities – researchers are researchers no matter where they work
  - Researchers in large cities...
    - ...have more often pursued dialogues about their research with members of the public.
  - Researchers in other cities...
    - ...have more rarely pursued dialogues about their research with members of the public. In somewhat contradictory fashion, they more often feel that a dialogue with the public provides new perspectives on their own research.

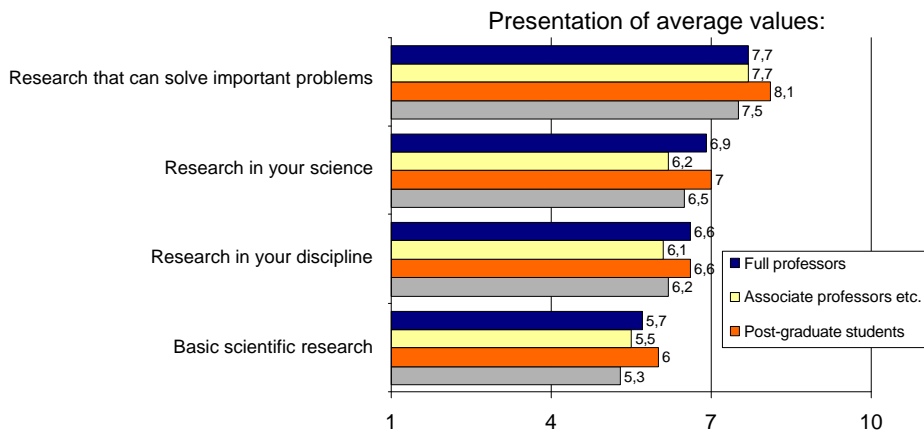
## Differences among various categories of researchers

- **Differences among various categories of researchers**

- Full professors – have a slightly higher opinion of themselves and their fields
  - They more often believe that people in general have an interest in research in their particular discipline and science.
  - They less often feel that the Swedish government should fund research concerning efficient, environmentally friendly energy sources.
- Lecturers, associate professors, research assistants etc. – have a slightly lower opinion of themselves and their field
  - They less often believe that people in general think it is important to fund research in their particular science.
  - They believe that people in general have a low interest in themselves and their discipline.
  - They less often believe that various research fields have a good chance of helping to solve various problems.
- Post-graduate students – the optimists?
  - Compared to full and associate professors etc., they have a significantly greater level of trust in researchers at companies.
  - They have a more positive image of people's trust in researchers.
  - They more often think that researchers should only do research which may yield useful results.
  - They more often feel that the Swedish government should fund research concerning efficient, environmentally friendly energy sources.
- Researchers at companies – great confidence in research generally and in their own field
  - More often are part of large research teams (more than 25 people).
  - More often feel that scientific and technological development work, respectively, have made life much better.
  - They more often believe that people in general think it is important to fund research in their particular discipline and science.
  - They less often feel that history is a science.

## Differences among various categories of researchers ...continued

Question: How interested do you believe people in general are in various kinds of research? Use a scale of 1-10 where 1 = No interest at all and 10 = Very great interest.



## Differences among various sciences

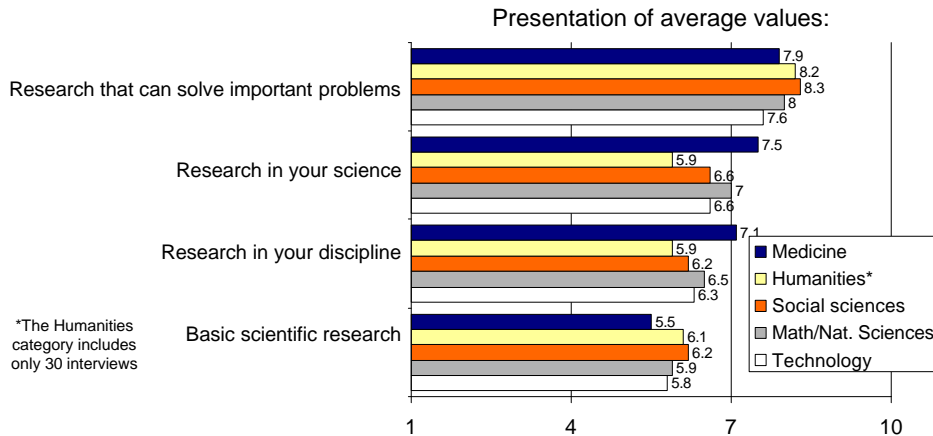
- **Medicine** – we are the best!
  - More often belong to larger research teams.
  - They more often believe that the public trusts and is interested in their science. Believe that the public thinks that research generally and research in medicine are important to fund.
- **Humanities** – interested in the general public but do not feel that it is mutual
  - More often belong to smaller research teams.
  - Much more often feel that the Swedish government should fund research on Sweden's modern history.
  - Have a low level of trust in researchers at companies.
  - Astrology is absolutely not a science.
  - More often feel that a dialogue with the public is both valuable to researchers and their obligation. They also believe that researchers in other sciences are worse at this. Despite this, they do not have a more intensive dialogue with the general public. They even talk less often with other categories affected by their research.
  - Less often believe that the public is interested in their discipline and they absolutely do not believe that the public thinks that the humanities are important to fund.
- **Social scientists** – lowest trust in technology and researchers at companies
  - More often belong to smaller research teams.
  - Do not feel that science and technology have made life better.
  - Have a low level of trust for researchers at companies.
  - More often feel that macroeconomics is a science.
  - They less often believe that they enjoy the trust and interest of the general public. They also less often believe that the general public thinks that the social sciences are important to fund.

## Differences among various sciences ...continued

- **Mathematics/natural sciences** – middle group
  - Feel that researchers do not need to do research that yields useful results.
  - Less often feels that a dialogue with the general public provides new perspectives on their own research.
- **Technology** – prefer to stay in their labs
  - Are least interested in a dialogue with the general public.
  - Feel that researchers should only do research that yields useful results.
  - Have the greatest level of trust in researchers at companies.

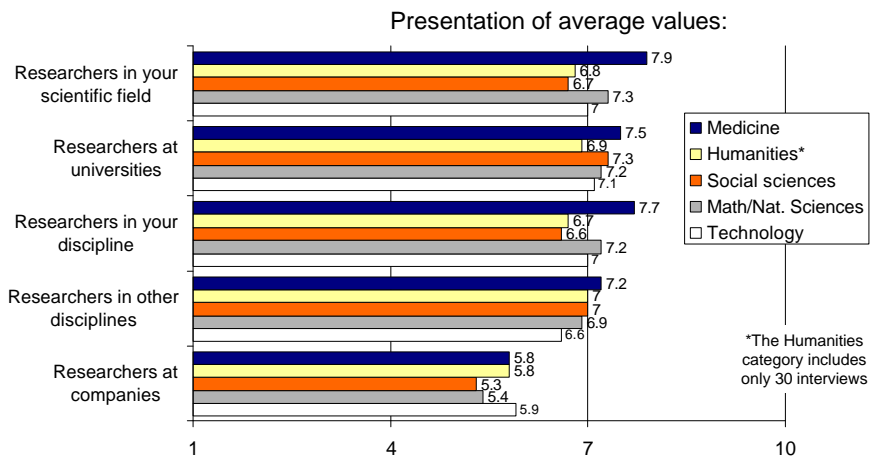
## Differences among various sciences ...continued

Question: How interested do you believe people in general are in different kinds of research? Use a scale of 1-10 where 1 = No interest at all and 10 = Very great interest.



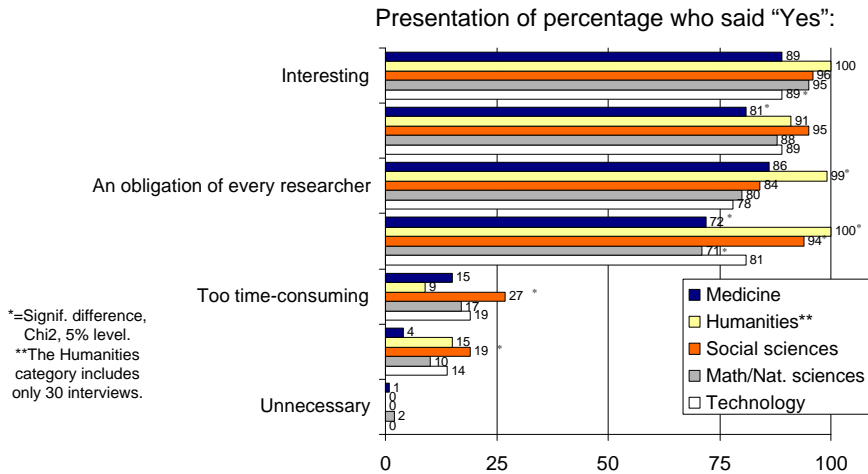
## Differences among various sciences ...continued

Question: How well do you believe people in general trust researchers? Use a scale of 1-10 where 1 = No trust at all and 10 = Very great trust.



## Differences among various sciences ...continued

Question A: Do you regard a dialogue with the public as...?



## Differences between large and small research teams

- **Research teams consisting of 1-5 researchers**
  - do not believe that people in general feel that Sweden should fund their science/discipline
- **Research teams consisting of 6 or more researchers**
  - believe that people in general think that Sweden should fund their science/discipline

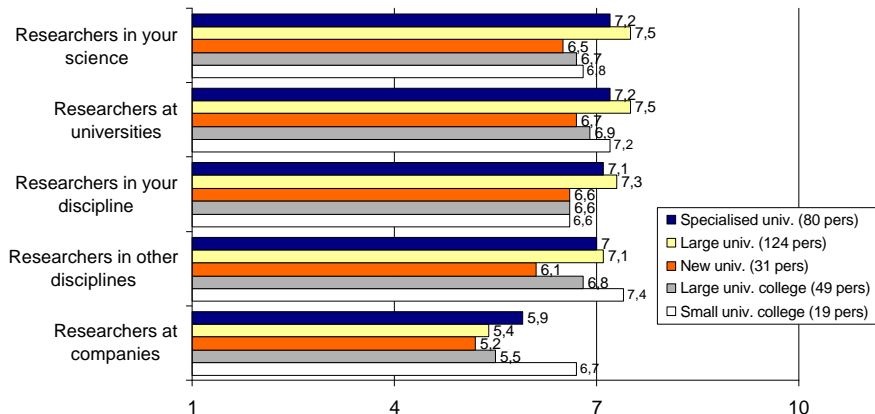
## Differences among researchers at various categories of universities

- **Specialised university**
  - Less often feel that researchers seem to try new things without paying enough attention to the possible risks.
  - More often believe that the public thinks it is important to fund their own discipline.
  - Have more often had a dialogue with groups affected by their research.
- **Large university**
  - Believe that the public trusts researchers at universities but not researchers at companies.
  - Believe in the value of a dialogue with the public (but in spite of this do not have more frequent dialogue than others).
- **New university**
  - Less often feel that research has a good chance of improving road safety and of slowing climate change.
  - Has a lower level of trust in researchers at companies.
  - Less often believes that the public thinks it is important for Sweden to fund their own discipline and science.
  - Less often believe that the public trusts researchers in other fields.
- **Large university college**
  - More often thinks that parapsychology is a science.
  - Less often believe that the public is interested in research (regardless of field).
  - Less often believe in the value of a dialogue with the public.
  - More often feel that science and technology are too difficult for most people to understand.
- **Small university college**
  - More often think that macroeconomics and history are sciences.
  - Less often believe that the public thinks it is important for Sweden to fund their own discipline.
  - Also less often believe that the public trusts their own discipline.
  - More often believe that the public trusts researchers at companies.
  - Less often think that a dialogue with the public is too time-consuming.
  - More often feel that research has a good chance of slowing climate change.

## Differences among various categories of universities ...continued

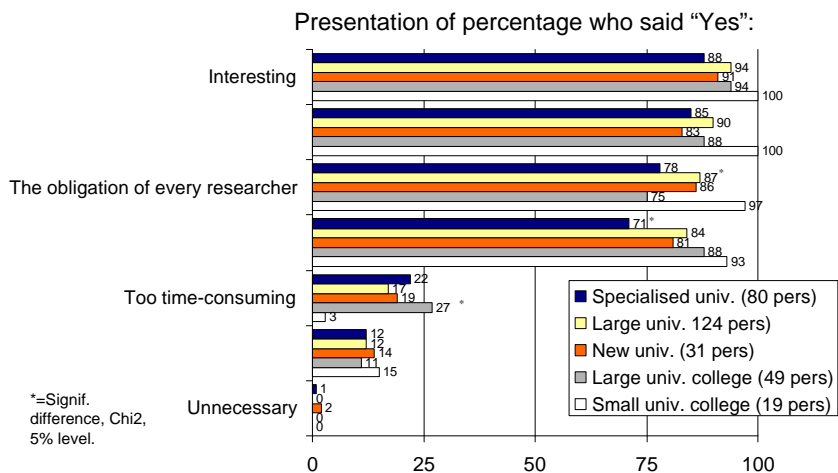
Question: How well do you believe people in general trust researchers? Use a scale of 1-10 where 1 = No trust at all and 10 = Very great trust.

Presentation of average values:



## Differences among various categories of universities ...continued

Question A: Do you regard a dialogue with the public as...?







## **4. A comparison between how researchers and the public view research**

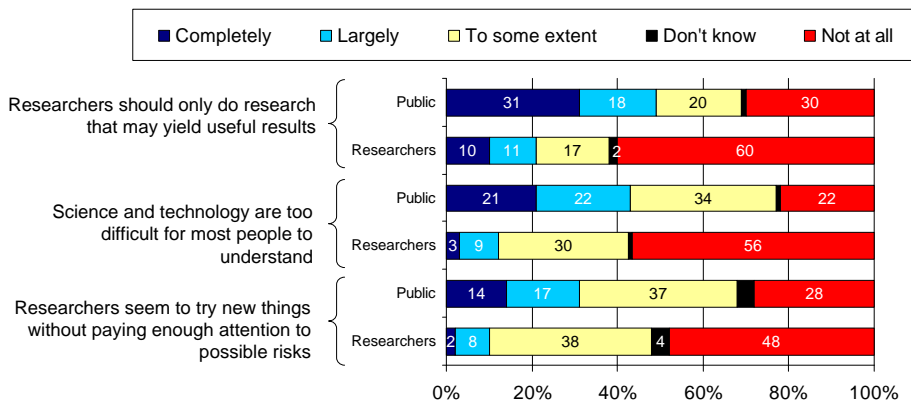


## A comparison between researchers and the public

- The public...
  - ... Much more often thinks that...
    - ...researchers should only do research that they believe may yield useful results.
    - ...researchers seem to try new things without paying enough attention to the possible risks.
    - ...science and technology are too difficult for most people to understand.
  - ...more often want the Swedish government to fund more research on new, better methods to treat cancer (81% compared to 61% who replied “very important”).
  - More often feel that parapsychology and astrology are sciences.
- Researchers
  - ...more often want the Swedish government to fund on the country’s modern history (12% compared to 7% who replied “very important”).
  - ...more often feel that history and biology are sciences.
  - ...have an even lower level of trust than the public for journalists at popular tabloid newspapers.
- Similarities
  - Researchers and the public think about equally often that science and technology have made life better for ordinary people in the past ten to twenty years.
  - Equally often believe that research has a chance to solve various problems.

## Statements about researchers and science

Question: I will now read out loud some statements that other people have made about researchers. Can you say whether you completely agree...?



## What fields are scientific?

**Question:** To what extent do you regard the following fields as scientific? FIVE-POINT SCALE FROM 5=HIGHLY SCIENTIFIC TO 1 = NOT AT ALL SCIENTIFIC

