

MISCONDUCT AND CONFIDENCE A MEDIA ANALYSIS

Does media coverage of research misconduct affect public confidence in science and scientists? This is the question that Swedish non-profit organisation Vetenskap & Allmänhet (Public & Science) has been investigating, together with the SOM (Society Opinion Media) Institute at the University of Gothenburg, in a new study.

Here are the main findings from the study **Misconduct and confidence – a study of media coverage of research misconduct and public confidence in research**. The complete study will be published in autumn 2014.



Vetenskap & Allmänhet

Research misconduct and confidence in research – a media analysis

The Swedish public's confidence in research is generally high. In recent years, there has also been a great increase in the resources allocated to Swedish research as a result of several government research and innovation bills. Our previous studies have shown a correlation between the public's confidence in research and their willingness for money to be invested in research. However, if people are to continue to support major public investment in research, it is crucial that this confidence remains high.

VA (Public & Science), together with the SOM Institute at the University of Gothenburg, has been conducting annual surveys to measure the level of public confidence in scientists and research for over ten years. The results show that confidence has overall remained relatively stable during the last decade, although there have been large fluctuations in confidence in certain years. As the media is the main source of news about research for most people, it is interesting to examine the extent to which media coverage of research can impact confidence levels. To investigate this, we have conducted a study to analyse the extent to which media coverage of research misconduct coincides with a decrease in public confidence in research and scientists.

METHODOLOGY AND MATERIALS

The study consisted of a systematic content analysis of a sample of the major Swedish news media (daily press and television). This included the nine largest Swedish newspapers (Dagens Nyheter, Svenska Dagbladet, Göteborgs-Posten, Sydsvenskan, Aftonbladet, Expressen, GT, Kvällsposten, Metro) and the

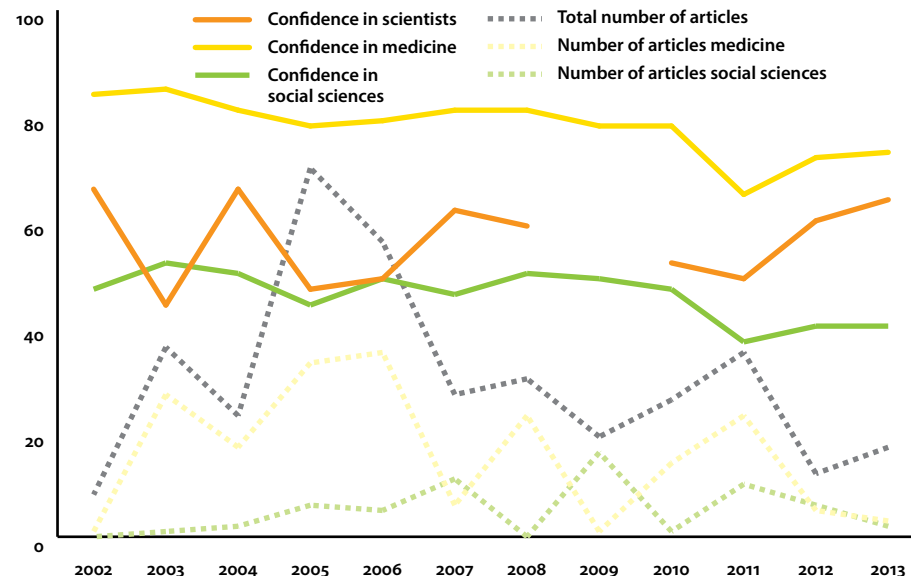
Swedish public service TV's main news programme (SVT Rapport). A total of 359 news items about scientific fraud or misconduct were included in the analysis, covering the period 1 January 2002 to 31 December 2013. The news items were coded and analysed in terms of content and structure.

RESULTS

As the graph shows, the number of news articles on research misconduct fluctuates largely from one year to the next. The dotted grey line shows the total number of articles on research misconduct per year. Medicine is the field with the greatest number of articles on research misconduct. Incidentally, medical research is the field most frequently reported upon by the media in general.

Also, when public confidence in different fields of research is measured, medicine comes out on top (solid yellow line). The graph also shows the confidence in research in social sciences (solid green line), as well as the confidence in scientists as a professional group (solid orange line.)

When we compare the media coverage and levels of confidence for different research fields, an increase in the number of reports on research misconduct coincides with a decrease in public confidence in several years, notably in 2005 and 2011. The 2011 SOM survey unfortunately suffered from technical problems, which to a certain extent should have influenced the decrease in confidence. In both 2005 and 2011 a certain – albeit weaker – connection is also visible if the media coverage of research misconduct is compared with the level of public



The solid lines show public confidence in scientists as a professional group as well as the confidence in medical research and social sciences, respectively. Confidence is counted as respondents who answered that they have very or fairly high confidence. The dotted lines show the number of articles on research misconduct per year as well as the number of articles on research misconduct relating to medicine and social sciences, respectively.

confidence in individual scientific fields.

The connection between increased media coverage of research misconduct and declining confidence levels is however, despite some similarities, not so clear. It is most likely that other factors have a greater impact on people's confidence in research and scientists. Previous studies have shown that age, level of education and place of residence, as well as the perceived benefits of the research, also influence a person's confidence in research. This study, like other studies (see for example the VA Barometer 2013/14), has shown that media consumption also has a great impact. The people who have the most confidence in research are those who regularly – at least three days a week – read a daily morning newspaper and who have a high level of education.

CONCLUSIONS

Our study does not support the hypothesis that media coverage of research misconduct has a direct negative impact on the public's confidence in research. We have seen some correlation between the media coverage of research misconduct and drops in levels of confidence, but additional in depth studies to further investigate possible links and causes are necessary. However, our analysis does confirm that other factors have a greater impact on public confidence in research, such as age, level of education, place of residence and, not least, exposure to news about research. In conclusion, the nature of the media coverage does not have a decisive impact on public confidence in research. In simple terms, it is better to have negative news coverage about research than no coverage at all.

VETENSKAP & ALLMÄNHET, VA, (PUBLIC AND SCIENCE) IS A SWEDISH NON-PROFIT ORGANISATION THAT PROMOTES DIALOGUE AND OPENNESS BETWEEN RESEARCHERS AND THE PUBLIC.

We work to create new and engaging forms of dialogue about research. VA is also developing new knowledge on the relationship between research and society through surveys and studies. Its members consist of some 80 organisations, authorities, companies and associations. In addition, it has a number of individual members.

If you would like more information about VA's work on evaluating public confidence or to receive the full report on **Misconduct and confidence** (available in Swedish only), please contact **Maria Lindholm**, Director of Research at VA: maria@v-a.se.

The study was conducted by **Ulrika Andersson** and is a part of the research project **Science in Society** that VA and the SOM-Institute run with financial support from Riksbankens Jubileumsfond.

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