

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/267641458>

Four answers to four questions (about risk communication)

Article in *Journal of Risk Research* · November 2014

DOI: 10.1080/13669877.2014.940598

CITATIONS

3

READS

176

1 author:



[Baruch Fischhoff](#)

Carnegie Mellon University

407 PUBLICATIONS 28,334 CITATIONS

SEE PROFILE

This article was downloaded by: [81.226.245.168]

On: 15 September 2014, At: 05:26

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Journal of Risk Research

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rjrr20>

Four answers to four questions (about risk communication)

Baruch Fischhoff^a

^a Department of Social and Decision Sciences, Department of Engineering and Public Policy, Carnegie Mellon University, Pittsburgh, PA, USA

Published online: 31 Jul 2014.

To cite this article: Baruch Fischhoff (2014): Four answers to four questions (about risk communication), Journal of Risk Research, DOI: [10.1080/13669877.2014.940598](https://doi.org/10.1080/13669877.2014.940598)

To link to this article: <http://dx.doi.org/10.1080/13669877.2014.940598>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

COMMENT

Four answers to four questions (about risk communication)

Baruch Fischhoff*

*Department of Social and Decision Sciences, Department of Engineering and Public Policy,
Carnegie Mellon University, Pittsburgh, PA, USA*

As captured in the title *The Philosophical Transactions of the Royal Society*, science was once seen as extending the knowledge sought by philosophy. As captured in Marx's well-known dictum, that knowledge is limited by philosophy's contentment with trying to understand the world, and not to change it.

As argued in Kasperson's thoughtful reflection (2014), science can be judged by its ability to change the world. Such change not only rewards society for its investment in science, but also provides science with the reality check of whether its theories make clear, useful predictions. That connection requires philosophical insight, in order to map its theoretical abstractions onto complex, ambiguous, uncertain real-world situations.

'Four Questions for Risk Communication' lead to four principles for letting the world change risk communication science. For researchers to act on that advice, they need clients willing to play their designated role. Those clients must recognize the importance of being driven by evidence, rather than by intuition; of listening to their public first, rather than assuming that they know what to say; and of accepting the possibility of heightened conflict, should better communication more clearly reveal opposing interests. There's a limit to what researchers can do when potential clients prefer to fly blind, rather than risk creating evidence that challenges their preconceptions or demonstrates that they are worthy of distrust.

Risk researchers committed to non-persuasive communication can't promise to 'deliver the public' for any client. However, they might be able to allay the fears of potential clients who feel that 'the truth is with them,' such that better-informed public discourse will reveal the value of their enterprise. In my experience, successful projects have achieved these goals, whereas less successful ones have not, sometimes through our own failings and sometimes due to circumstances beyond our control. I imagine that other readers have similar experiences.

Get to know the client. There are few substitutes for sustained personal relations in order to create trust. For any communication, they demonstrate commitment to the client, and not just to the project. For risk communications, they allow educating clients in scientific perspectives that will be so foreign to them that they have difficulty securing relevant expertise.

Get to know the client's business. Serving clients means learning enough about the risks and benefits of their enterprise to represent it faithfully and understand stakeholder concerns. Unlike persuasive communications, where it might be enough

*Email: baruch@cmu.edu

to get the atmospherics right and identify a few potent claims, risk communication requires enough substantive mastery to help clients identify, and perhaps create, evidence relevant to their audiences.

Represent all the social, behavioral, and decision sciences, not just your own. Clients naturally hope for simple solutions to their communication problems. Researchers naturally hope to provide them, based on their own favored theories or methods. However, even when we happen to have the key results for those clients who happen to come our way, successful communications require attention to details beyond anyone's expertise: affect, culture, images, trust, numbers, uncertainty, etc. We need to reassure clients that we represent it all, even when that diminishes the importance of our piece of the puzzle.

Create realistic expectations. Clients may expect too much from risk communications if they misinterpret researchers' enthusiasm over statistically significant results as ensuring practically significant impacts – not realizing that we design studies to maximize the effects that interest us. Clients may expect too little if they misinterpret the research literature's focus on problems (e.g. biases, framing effects) as demonstrating the public's incompetence – not realizing that we use anomalies to reveal underlying processes.

Our ability to achieve these goals depends both on our own skill and on the support provided by our institutions. For academic researchers, pursuing these goals may be a tough sell. Time spent getting to know clients is time away from publishing and teaching. It may also raise doubts about our impartiality. Time spent learning about a risk is time away from keeping abreast of our own field. It might also be threatening to colleagues content with knowing just the gist of a topic. Drawing on others' work shares the glory. It might also mean forgoing a clean field test of a pet theory in favor of a complex intervention. Lowering inflated client expectations might mean losing a project to competitors who promise to do the impossible. Talking up the public's learning potential might mean forgoing the chance to pander to potential clients' prejudices.

In instructive ways, these challenges are smaller for behavioral economists than for many risk communication researchers. Economists are comfortable manipulating others, if that will serve the interests of their clients (including clients hoping to serve the interests of those being manipulated). Economists are accustomed to using field data with the complexity that experiments seek to exclude. Economists can choose interventions that manipulate a variable or two, making their field trials akin to experiments, unlike risk communicators who must face the complexity and heterogeneity of the decisions defining the public's need to know. Economics has subfields where substantive knowledge is expected (e.g. agricultural, labor, or environmental economics), whereas other behavioral sciences only do for topics that they own (e.g. education, human factors).

Nonetheless, behavioral economics has created an awareness of behavioral research that could help risk communication research realize Kasperson's four principles – as long as it does not lose its identity in the process. Thus, risk communication researchers need to find clients who want the power of behavioral research, but realize (or can be convinced) that they cannot manipulate their stakeholders, that other people need to understand the nature of their business, that they should be guided by evidence, and that they will benefit from sustained relationships with researchers. Finding such clients requires good fortune and persistence.

Cultivating them requires skill and commitment – along with support from academic institutions that see how essential such collaborations are to their society’s future and their own.

Acknowledgment

Preparation of this article was supported by the National Science Foundation (SES-0949710). The views expressed are those of the author.

Reference

Kasperson, R. 2014. “Four Questions for Risk Communication.” *Journal of Risk Research*, doi: [10.1080/13669877.2014.900207](https://doi.org/10.1080/13669877.2014.900207)