

# **Just say what they expect you to say: The influence of argumentation on trust in organizations**

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## **Abstract**

Public trust in the organizations concerned with modern technologies increases public acceptance of these technologies [1, 2]. The importance of public trust raises the question of how organizations can instigate trust in the general public. The current research focuses on public trust in organizations as a function of argumentation about CCS technologies. The first hypothesis, that organizations instigate more trust in the general public by arguing in line with the public's expectations about the motives of the organizations than by arguing in contrast with the public's expectations, received initial support from the data. The second hypothesis, that perceived honesty accounts for different levels of public trust, also received support from the data. These results suggest that public trust differs as a function of the combination between motives of organizations and their communicated arguments. An organization instigates more trust in the general public when the public judges the organization to be honest compared to dishonest, whereas perceptions of honesty seem dependent on public expectations regarding to the motives of organizations.

**Keywords:** public trust, motives, communication, modern technology

## **Theoretical background**

Since the general public lacks the knowledge to adequately assess the risks and benefits of complex CCS technologies, the level of public trust in organizations may well guide the public in developing standpoints about CCS technologies [cf. 1, 2, 3]. In a sense, trust may serve as a heuristic (i.e. simple rule of thumb) that makes highly complex situations easier to handle and complex decisions easier to take. That is, when one does not have sufficient knowledge about CCS technologies to form an adequate opinion, one may decide to accept CCS technologies just because one has trust in the organizations that regulate and promote CCS technologies. Similarly, the general public may reject CCS technologies when it is distrusting the organizations concerned with CCS technologies. Since public trust thus plays such an important role in the domain of new technological developments, it is important that communication about CCS technologies by organizations instigates trust in the general public. The current research addresses the question whether the kind of argument in favor of CCS technologies that organizations communicate influences the level of public trust in organizations.

Scholars have conceptualized public trust as 'the willingness to rely on those who have the responsibility for making decisions and taking actions related to the management of technology, the environment, medicine, or other realms of public health and safety' [4; p. 354]. The concept has frequently been described in terms of several distinct dimensions [see, 5, 6]. The multidimensionality of the public trust concept implies that public trust stems from a combination of perceived competence, perceived honesty and perceived concern for the general public's well-being. For communication to influence the degree of public trust in organizations, communication by organizations should affect public perceptions of at least one of these dimensions. For example,

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the general public may trust an organization to a greater extent if the public perceives the organization to argue in favor of CCS technologies out of concern for the interests of the general public compared to concern for its own interests. On the other hand, an organization may provide an argument in favor of CCS technologies that emphasizes on the benefits of CCS technologies for the general public's well-being, whereas the public believes the organization merely to act out of self-interest. If so, the organization may be perceived to be dishonest and, consequently, will receive little public trust. The model depicted in Figure 1 illustrates the above reasoning.

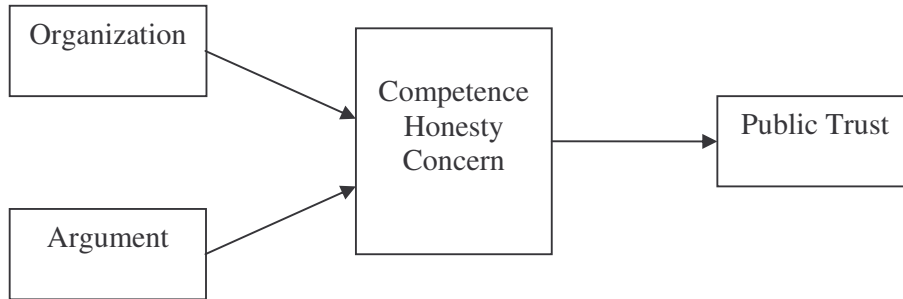


Figure 1. Schematic representation of the public trust model.

*Expected motives, arguments and public trust*

Terwel, Harinck, Ellemers, & Daamen [7, study 1] have previously shown that the public believes that in the context of CCS technologies environmental NGO's act primarily on the basis of an 'ideological' motive represented by concern for future generations, the environment and the general public's well-being. In contrast, the public believes industrial organizations to act primarily upon an 'instrumental' motive represented by concern for self-interest, image and economic concerns. In addition, people seem to value an environmental argument regarding the implementation of CCS technologies over an economic argument [7, study 2].

On the basis of Harinck [8], who has shown that openly communicating self-interest increased perceptions of honesty, we can predict that providing an argument that corresponds with the motive attributed to an organization will lead to greater perceived honesty than providing an argument that does not correspond with the attributed motive. In the case that an environmental NGO provides an argument that does not correspond to the ideological motive that environmental NGO's are expected to have (i.e. an economic argument), the public may doubt whether the organization is honest. In a similar vein, the public may perceive industrial organizations to be more honest after providing an expected, economic argument compared to an unexpected, environmental argument. As a result of the positive relation between perceived honesty and public trust, the above would validate Kasperson and colleagues' [5] claim that violation of expectations may cause serious decline in the level of public trust. Accordingly, we predict,

*Hypothesis 1.* Congruence between type of argument and type of organization leads to more public trust than incongruence.

*Hypothesis 2.* Congruence between type of argument and type of organization leads to higher levels of perceived honesty than incongruence.

*Hypothesis 3.* Perceived honesty mediates the influence of congruence between type of argument and type of organization on public trust.

## Methodology

### *Participants and design*

A total of 78 students from Leiden University participated in the study and were randomly allocated to one of the four conditions of the experimental design. The source of communication either was presented as a group of environmental NGO's or as a group of industrial organizations. The provided argument either emphasized environmental considerations or economic considerations. Thus, participants read either an environmental or an economic argument provided by either environmental NGO's or by industrial organizations.

### *Procedure*

Upon arrival at the laboratory participants were seated in separate cubicles, each containing a personal computer. From the screen, they read a text about the generation of energy in the Netherlands, greenhouse gasses, global warming and an introduction to CCS technologies, presumably written by an expert. Next, the participants read that a group of environmental NGO's vs. industrial organizations had written a report about their opinion with regard to CCS technologies. After asking the participants to what extent they thought that the group of organizations based their opinion about CCS technologies on 1) environmental concerns and 2) economic concerns, the group of organizations provided an environmental or an economic argument in favor of CCS technology depending on the experimental condition<sup>a</sup>. Then, the participants answered to the checks of the experimental manipulations and filled out a questionnaire that measured participants' trust in the organizations, perceived honesty, perceived competence, and perceived concern for public interests.

### *Dependent variables*

*Manipulation check for type of organization* One question served to check whether participants had correctly understood the type of source communicating the argument. The item read 'Which group of organizations has written the report?', and participants had to choose one of three alternatives, 1) a group of environmental NGO's 2) a group of industrial organizations, or 3) another group of organizations.

*Attributed motives* We measured expected motives with two questions prior to the manipulation of argument: 1) To what extent do you expect that the standpoint of the group of organizations results from 1) environmental considerations and 2) economic considerations (1 = *not at all*, 7 = *very much*). These questions allowed us to determine (in)congruence between type of argument and type of organization.

*Public trust* The questionnaire contained three items that measured trust in the organization which we averaged into a trust index ( $\alpha = .84$ ). The items read 'to what extent do you trust *the group of organizations?*', 'To what extent does the argument that *the group of organizations* provides invokes trust?', and 'To what extent do you consider the argument that *the group of organizations* provides trustworthy' (1 = *not at all*, 7 = *very much*).

*Perceived honesty* The questionnaire contained four items that measured perceived honesty which we averaged into a perceived honesty index ( $\alpha = .88$ ). Examples of items were 'To what extent do you consider *the group of organizations* to be honest?' and 'To what extent do you think that *the group of organizations* has a hidden agenda?' (recoded; (1 = *not at all*, 7 = *very much*).

*Perceived competence* The questionnaire contained four items that measured perceived competence which we averaged into a perceived competence index ( $\alpha = .88$ ). Examples of items were 'To what extent do you think *the group of organizations* has experience in the area of greenhouse gasses and technology?' and 'To what extent do you think that *the group of organizations* is able to apply relevant knowledge in the context of greenhouse gasses and technology?' (1 = *not at all*, 7 = *very much*).

*Perceived concern* The questionnaire contained two items that measured perceived concern for public well-being which we averaged into a perceived concern index ( $r = .81$ ). The items read 'To

what extent do you think *the group of organizations* cares about the well-being of the Dutch population?’ and ‘To what extent do you think that *the group of organizations* strives for the interests of Dutch inhabitants?’ (1 = *not at all*, 7 = *very much*).

## Results

*Manipulation check for type of organization* Each of the 78 participants answered correctly to the question asking which group had written the report about CCS technologies.

*Correlations between dependent variables* Correlational analyses showed significant positive associations between perceived honesty, perceived competence, and perceived concern for public well-being on the one hand and public trust on the other (Table 1). It is important to note that whereas the level of perceived honesty, competence and concern did relate to the level of public trust, the attributed motive (environmental considerations or economic considerations) in itself did not relate to public trust.

Table 1. Correlations between dependent variables

	2	3	4	5	6
1. Environmental considerations	-.68**	.16	.33**	-.13	.32**
2. Economic considerations	-	.03	-.17	.32**	-.24*
3. Public trust		-	.76**	.34**	.64**
4. Perceived honesty			-	.17	.60**
5. Perceived competence				-	.22
6. Perceived concern					-

Note.  $N = 78$

\*  $p < .05$ , \*\*  $p < .01$  (2-tailed).

*Attributed motives* Analyses of variance (ANOVA's) with type of institution as independent variable showed, as expected, that the participants had the strong expectation that environmental NGO's, in contrast to the industry, based their standpoint about CCS technologies on environmental concerns ( $M_{env. NGO} = 5.78$ ,  $SD = 1.21$  vs.  $M_{industry} = 2.95$ ,  $SD = 1.45$ ),  $F(1, 75) = 87.80$ ,  $p < .001$ . A similar analysis performed on economic concerns showed that the participants expected the industry to base their standpoint about CCS technologies on economic concerns ( $M_{industry} = 6.13$ ,  $SD = .99$  vs.  $M_{env. NGO} = 2.90$ ,  $SD = 1.55$ ,  $F(1, 75) = 119.03$ ,  $p < .001$ ). We thus successfully created congruent and incongruent combinations of the experimental factors.

*Hypothesis 1*, that congruence between type of argument and type of organization leads to more public trust than incongruence, received partial support from the data. Analysis of variance (ANOVA) revealed an interaction between type of argument and type of organization,  $F(1, 74) = 3.81$ ,  $p < .06$ ,  $\eta^2 = .05$ . Figure 2 depicts the pattern of the means. Additional simple effects analyses showed that the obtained difference in public trust for environmental NGO's was statistically marginally significant ( $p < .09$ ), whereas the difference for industrial organizations was not ( $p > .10$ ).

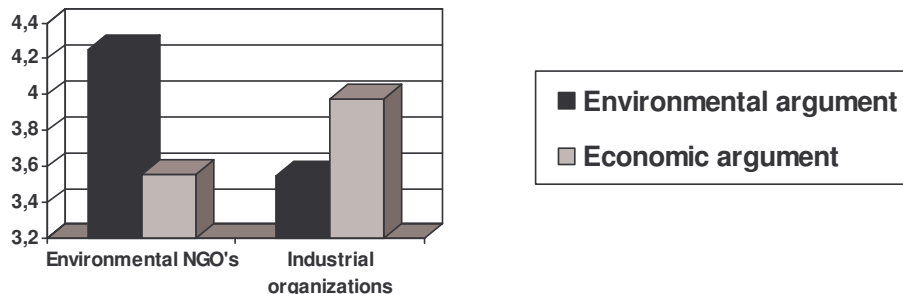


Figure 2. Public trust as a function of type of argument and type of organization.

*Hypothesis 2*, that congruence between type of argument and type of organization leads to higher levels of perceived honesty than incongruence, received support from the data. Analysis of variance revealed a main effect for type of organization,  $F(1, 74) = 12.68, p < .001, \eta^2 = .15$  as well as the predicted interaction between type of argument and type of organization,  $F(1, 74) = 8.19, p < .01, \eta^2 = .10$ . Simple effects analysis showed that participants perceived environmental NGO's to be more honest after provision of an environmental argument than after provision of an economic argument ( $M_{\text{env. arg.}} = 4.64, SD = 1.17$  vs.  $M_{\text{econ. arg.}} = 3.75, SD = 1.51, p < .03$ ). Similar analysis for industrial organizations showed that perceived honesty did not statistically differ as a function of argumentation, although the pattern of the means was as predicted ( $M_{\text{env. arg.}} = 3.03, SD = .95$  vs.  $M_{\text{econ. arg.}} = 3.58, SD = .54; p = .20$ ).

*Hypothesis 3*, that perceived honesty mediates the influence of congruency between type of argument and type of organization on public trust, received support from the data. We applied Baron and Kenny's [9] procedure to test for the hypothesized mediation. The first step was to examine the interaction effect between type of argument and type of organization on public trust, which we already did in order to test hypothesis 1. The second step was to examine the interaction effect between type of argument and type of organization on perceived honesty. This part of the analysis we did in order to test hypothesis 2. Both required interaction effects appeared. The third step was to regress perceived honesty on public trust, which yielded the required significant correlation,  $r = .76, p < .001$ . The fourth step was to analyze whether the interaction effect between type of argument and type of organization significantly dropped after inclusion of perceived honesty in the equation. Analyses of covariance (ANCOVA) showed that the interaction term dropped to non-significance after inclusion of perceived honesty,  $F(1, 73) = .21, ns$ . Finally, a Sobel test showed that the decrease of the interaction effect was significant,  $z = 2.41, p < .05$ .

## Discussion

The current research dealt with the question what organizations should convey in order to raise trust in the general public. We compared evaluations of industrial organizations and environmental NGO's after they provided an environmental or an economic argument in favor of CCS. We predicted that the level of public trust in organizations is higher after the provision of an argument that is congruent with the attributed motive than after the provision of an argument that is incongruent with the attributed motive. Results partly supported the hypotheses. The level of public trust in environmental NGO's was dependent on the type of argument. Environmental NGO's instigated more trust in the public when they communicated an expected environmental argument compared to an unexpected economic argument. It seemed that industrial organizations, in contrast, instigated more trust in the general public when they communicated an economic argument compared to an environmental argument, yet, the difference in means did not reach statistical significance. Additional mediation analyses showed that perceived honesty accounted for the interaction effect for type of argument and type of organization on public trust. Thus, in order to instigate trust in the general public organizations benefit from saying what people expect the organization to say, and the explanation for these findings lies in the influence of congruence between type of argument and type of organization on perceived honesty.

These findings are in contrast with social psychological literature on stereotyping that has provided Expectancy Violation Theory (EVT). EVT states that a target whose characteristics violate the perceiver's stereotype-based expectations will be evaluated more extremely [10, 11]. Stereotype-based expectations about environmental NGO's involve environmental concerns, whereas expectations about the oil and gas industry involve economic concerns. Since previous research has additionally shown that, in the context of CCS technologies, people value an environmental argument over an economic argument [7], violation of stereotype-based expectations by provision of an unexpected argument should be positive for the industry and negative for environmental NGO's. The current data however point in the opposite direction. Even though EVT suits to explain



the low level of trust in environmental NGO's when they provide an unexpected economic argument, it does not explain the low level of trust in industrial organizations when they provide an unexpected environmental argument. It seems therefore that EVT does not hold for judgments of trust, or that the provision of an argument is not the kind of expectancy violation the theory aims for to predict. That is, when violations only affect evaluations other than perceived honesty (e.g. perceived technical expertise), than violations of expectancies may have the predicted effects on subsequent evaluations. Further research needs to clarify the conditions under which EVT can be useful to predict successful communication.

The current study is a first attempt to examine the interplay between expected motives and perceived honesty in the face of argumentation about CCS technologies. Although perceived competence is not a central construct in the current study, we consider it a crucial precondition for public trust because an institution that is incompetent is likely to be considered not worthy of trust. Future research may examine how communication can affect perceived competence.

#### Footnote

<sup>a</sup> Participants subjected to environmental NGO's actually read 'the group of environmental NGO's' and those subjected to industrial organizations actually read 'the group of industrial organizations' instead of 'the group of organizations'. To emphasize on this point, we display 'the group of organizations' in italics when items referred to the particular subjected group of organizations.

#### Acknowledgement

This research is part of the CATO programme, the Dutch national research programme on CO<sub>2</sub> Capture and Storage. CATO is financially supported by the Dutch Ministry of Economic Affairs (EZ) and the consortium partners ([www.co2-cato.nl](http://www.co2-cato.nl)).

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