



Agentschap NL  
Ministerie van Economische Zaken



Universiteit Leiden

## “Scrutinizing the impact of CCS communication on the general and local public”

### Workshop: “How to communicate CCS?”

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*Experts may communicate CCS information to lay people via*

## ***Focus Groups or Information-Choice Questionnaires*** ***Which method results in better opinions?***

*Data of experimental research in six countries*

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## Effectiveness of CCS communication methods and indicators of opinion quality

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CCS communications are effective to the extent they result in well-informed, well-considered and high quality opinions

Indicators of opinion quality include (e.g., Price & Neijens, 1997) :

-consistency: e.g., consistency between aspect evaluations and overall evaluation (e.g., CCS seen as risky and expensive → negative attitude)

-stability: the extent to which opinions are stable over time (e.g., correlation between 1<sup>st</sup> and 2<sup>nd</sup> time the overall opinion on the same CCS option is asked)

-confidence: subjective sense of conviction or validity about one's opinion

## Why provide information on CCS before you ask the public for their opinions? If you don't, you get “low quality” opinions

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Awareness of CCS is low (e.g. in NL 50 % never heard of CCS).

Uninformed opinions on CCS:

unstable (weak predictors of the same opinions minutes or days later:  
correlations around 0.30 – 0.45)

useless to predict future public support /opposition CCS

People need to process information on CCS in order to form their own, well  
considered opinion on CCS

Informed public opinions are proven to be more stable, based on evaluated  
attributes of CCS, and better predictors of public support/opposition

To avoid manipulation, information should be:

1. valid, 2. relevant (not complete), 3. balanced, and 4. comprehensible

## Do Focus Group Discussions (FGD) result in good quality opinions which indicate public support/opposition?

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### Focus group:

6-10 people discuss a topic (e.g., CCS)  
expert presents info  
moderator guides discussion

Hypothetical

Pro:

- accountability promotes systematic information processing and information integration (Tetlock, 1983)
- opportunity to ask expert for clarification
- positive group processes: interaction may facilitate exchange of ideas and may stimulate group members' thinking

Con:

- negative group processes: dominant (or shy) persons or peer pressure or 'group think' may be responsible for incomplete or biased info processing
- results are not representative for population unless you organize 100 focus groups



## Do Information-Choice Questionnaires (ICQ) result in good quality opinions which indicate public support/opposition?

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### ICQ:

individual respondents behind computer are helped to process expert information (on CCS) before they are asked for opinions

#### Pro:

-ICQ is designed to collect informed opinions of a population

-procedure to help process and integrate info: e.g. respondents are requested to give an evaluation of each consequence of a CCS option (-9 “big disadvantage” via 0 “totally irrelevant” to +9 “big advantage”). On the basis of these evaluations the subjective utility of option may be determined which helps to evaluate options overall

-complex info is better understood when it is written than when it is spoken



#### Con:

-no accountability effects  
-no opportunity to ask for clarification  
-no positive group processes, e.g. thought provoking interactions

## Method of the experimental comparison of 2 communication methods in each of the six countries

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Per country 60 people got identical information on CCS:  
30 via Focus Groups (3 FG with 10 participants each)  
30 via Information-Choice Questionnaires (ICQ)

FGs: 3 hours, real experts presented identical info, professional moderator led discussions according to script, questionnaire at end

ICQ: individually completed, on average 1 hour 10 minutes

FG participants were perfectly matched with ICQ participants on education level, occupation, age, sex (e.g., a nurse 40 yr in FG, a nurse of around 40 in ICQ)

Information on energy mix, on global warming, on CCS in general, on two specific CCS options

368 participants in 6 countries combined : 184 FG and 184 ICQ

## Results

### comparison of Focus Groups (FG) and Information-Choice Questionnaire (ICQ) on opinion consistency

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Both CCS options had 7 'shared' consequences (safety of transport, safety of storage, CO<sub>2</sub> leakage, reliability of energy supply, storage capacity in years, price, contribution to greenhouse effect)

Multiple correlations between evaluations of 'shared' consequences and overall opinion for two CCS options

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	FG	ICQ
CCS Option 1	0.53	0.72
CCS Option 2	0.51	0.75

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#### Conclusion:

Opinion consistency is significantly higher for ICQ respondents than for FG participants

## Results of the comparison of Focus Groups and ICQ on opinion stability and opinion confidence

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### Stability:

Overall opinion on CCS options was measured (1=very bad, 7=very good) at T1 and at T2 (around 20 minutes later).

Absolute difference between overall opinion at T1 and T2 was on average larger for FG participants (e.g. 0.87) than for ICQ respondents (e.g. 0.61)

Conclusion: Opinions are somewhat more stable in ICQ than in FG

### Confidence:

1. Insufficient (1)/ample (7) info?
  2. Not at all (1)/completely (7) able to form accurate impression?
  3. Very uncertain(1)/certain (7) about overall opinion?
- Mean confidence index (1 & 2 & 3) was 4.9 in ICQ and 4.5 in FG

Conclusion: Opinion confidence is higher in ICQ than in FG

**Results**  
**of the comparison of Focus Groups (FG) and ICQ**  
**control measures**

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- Score on 15 MC items knowledge test was on average equal in FG (8.8 items correct) and in ICQ (8.9)
  
- Score on 5 item perceived information quality was on average equal in FG (5.3 on 7 point scale) and in ICQ (5.2):  
Info seen as unbiased, evenhanded, comprehensible, valid and useful
  
- Perceived credibility of expert in FG was on average high:  
Perceived as genuine expert, honest, reliable (5.5 to 5.8 on 7 point scales)

**Conclusion:**

higher opinion quality in ICQ than in FG is

- not due to differences in knowledge transfer or perceived info quality
- not due to experts in FG's who are not credible

## Conclusions and discussion comparison of Focus Groups (FG) and Information-Choice Questionnaire (ICQ)

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This cross-national study shows:

- CCS communication is more effective via ICQ than via FG discussions
- ICQ leads to higher quality opinions which are more consistent, more stable and that people are more confident about

However, FG discussions score not bad on opinion quality

Conditions of this study were optimal e.g., information very good (valid, relevant, balanced, and comprehensible), trustworthy expert, balanced composition of FG, detailed script for moderator.

Nevertheless, we found some evidence for group processes in FG

Proposal: discuss costs and advantages of FG and ICQ in break-out session

**For further details please visit**

**[www.ccs-communications.gr](http://www.ccs-communications.gr)**