

Comparative communication science leads to new theoretical approaches for science communication

The need for crossing borders of communication sciences

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Abstract / Conclusions

Comparative communication science is a useful research method, leading to:

- 1) a new categorisation for science communication goals which give way to more theoretical transparency and development of effective communication about science [fig.2];
- 2) terms like *self efficacy* obtained from health communication are useful in indicating new theoretical possibilities in science communication [fig.3].

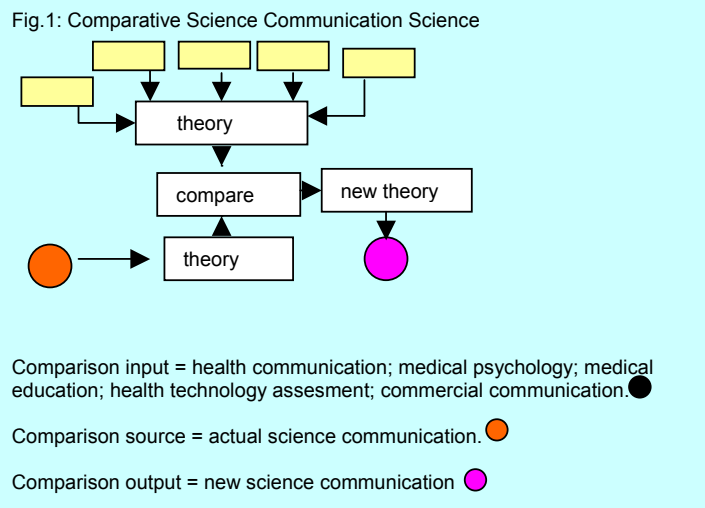
Introduction / Research questions

There is a strong need for a profound theoretical bases for effective science communication. We did ask ourselves:

- 1) Is it possible by comparing the theoretical developments in other fields of communication to the developments in science communication to formulate such a profound theoretical bases? [fig.1]
- 2) Is it possible to indicate the very identity of science communication compared to other fields of communication?

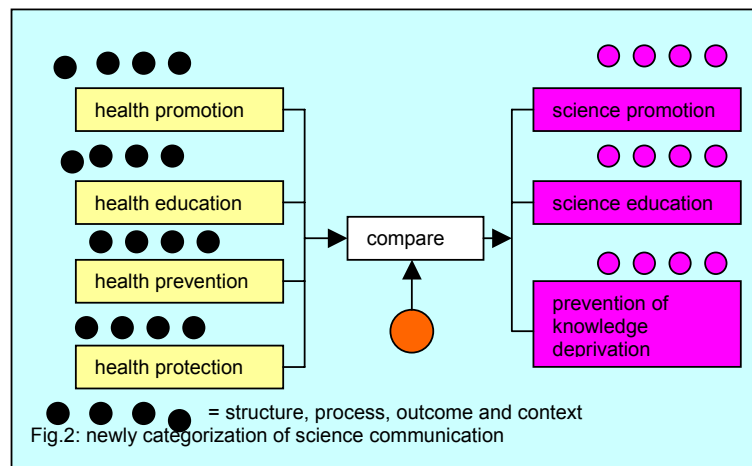
Method / Case

Two phased systematic literature research in the field of predictive DNA diagnostics. Method obtained from Evidence Based Medicine.



Preliminary results

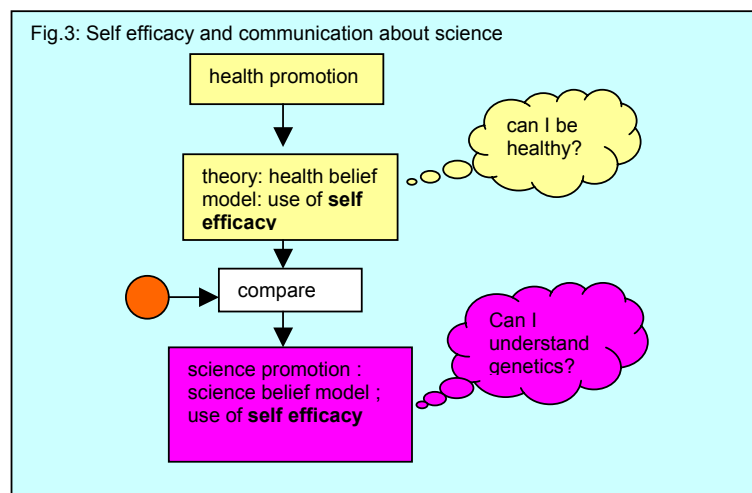
- 1) Thoughts on the *categorisation* in the field of health communication - according to their communication targets - are very useful to categorise the field of science communication, according to different science communication goals. These different goals (outcomes) implicate different processes, structures and do have different contexts, which must be theoretically sort out in order to develop effective science communication [fig. 2]. So science communication could be divided in:
 - *science promotion* = to inform people about the impact or process of science or to develop regulations to give people knowledge on this field;
 - *science education* = the actual biomedical science communication on the facts of science;
 - *prevention of knowledge deprivation* = the facts that the audience ought to know, like in instructions.



- 2) Models on the field of health promotion often use the term *self-efficacy*: 'Can I help my self'. By using this concept and its theories within the field of science communication gives way to learn how for example the lay audience can overcome difficulties in understanding - for example - maths like notations (i.e. 80% risk). [fig.3]

Future research

By further researching the usefulness of insights of the different disciplines we may gain some knowledge on the question: which are the very entities of communication about science? And of course we may find other useful theories or indications of theories which could form a profound theoretical bases for science communication. All this may lead to a better understanding of the lay audience of predictive DNA diagnostics and its implications on society and the individual.



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