The challenges and opportunities
Of conducting a systematic literature review in the field of doctor-patient communication

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Amsterdam-Lugano Colloquium • 12 March 2012
A Systematic Review Process

In 8 steps:

[1] [2] [3]
[7] [8]*

Presentation Outline

Conducting a systematic literature review in 8 steps:

[1] The research idea – planning a review
[2] Conducting a literature search
[3] Organizing your findings
[6] Categorizing your findings creatively
[7] Writing up your results
[8] Publishing your results
Research Plan

Research aim:
To systematically explore the extent to which theories of argumentation have been used and applied by scholars from various fields in order to analyze, understand, facilitate, and improve doctor-patient consultation.

Research methodology:
Systematic literature review

Research purpose:
 To provide a first step towards integrating insights from argumentation theory into contemporary views of patient-centered medicine and evidence-based medicine.

 To provide suggestions for further (empirical) research, in particular focusing on the potential effects of doctors’ argumentation on consultation outcomes.
[1] Research Plan

Challenges:

- Delineating the research topic
- Establishing a novel approach/topic
- Planning ahead

Opportunities:

- Providing a solid basis for your research
- Providing a reference point for others (citation value)
- Adding something new
[2] Literature Search

- **Eight databases:** Communication & Mass Media Complete, JSTOR, PsycInfo, PubMed, SAGE, ScienceDirect, SpringerLink, and Wiley Online Library.

- **Boolean search phrase:**
  
  "medical consultation"
  
  OR
  
  "doctor patient consultation"
  
  AND
  
  (argu*) OR (difference* of opinion) OR (disagree*) OR (discuss*) OR (disput*) OR (deliberat*) OR (negotiat*) OR (persua*) OR (reason*) OR (rhetoric*)

- **Timeframe:** May - June 2011
[2] Literature Search

**Challenges:**
- Selecting the databases
- Formulating the search “code”
- Setting search criteria
- Choosing additional search strategies

**Opportunities:**
- Providing a solid basis for your review
- Forming a first impression of “what’s out there”
- Getting in touch with experts and getting feedback

What, where, who, why, which, when, how?
[3] Preliminary Findings

- **Database search** yielded 1330 articles

- **Abstract analysis** by two independent raters

- **To be included for further analysis**
  Journal articles, books and chapters, and proceedings papers had to…
  - Be officially published – online or in print
  - Be written in English;
  - And explicitly discuss the role of argumentation (theory) in the context of doctor-patient consultation

  **Exploratory purpose**
[3] Preliminary Findings

**Challenges:**

- Establishing **inclusion/exclusion criteria**
- **Keeping track** of findings

**Opportunities:**

- **Separating** the wheat from the chaff
- **Organizing data:** makes analysis easier

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**What is relevant? What do I need to know from each publication? Is it a problem if my inclusion criteria are a bit vague?**

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### Abstract analysis with co-raters (phase I)

**Table 2.2   Inter-rater reliability**

<table>
<thead>
<tr>
<th>Database</th>
<th>Articles</th>
<th>Inter-rater agreement</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Found</td>
<td>Included</td>
<td>%</td>
</tr>
<tr>
<td>Ebscohost</td>
<td>88</td>
<td>5 (6%)</td>
<td>.99</td>
</tr>
<tr>
<td>JSTOR</td>
<td>291</td>
<td>3 (1%)</td>
<td>.98</td>
</tr>
<tr>
<td>SAGE</td>
<td>20</td>
<td>1 (5%)</td>
<td>.90</td>
</tr>
<tr>
<td>Wiley</td>
<td>396</td>
<td>12 (3%)</td>
<td>.98</td>
</tr>
<tr>
<td>Springerlink</td>
<td>214</td>
<td>11 (5%)</td>
<td>.99</td>
</tr>
<tr>
<td>ScienceDirect</td>
<td>102</td>
<td>14 (14%)</td>
<td>.90</td>
</tr>
<tr>
<td>PubMED</td>
<td>219</td>
<td>8 (4%)</td>
<td>.98</td>
</tr>
<tr>
<td>Overall</td>
<td>1330</td>
<td>54 (4%)*</td>
<td>.97</td>
</tr>
</tbody>
</table>

* Of which 46 unique items

➤ **Result: 46 contributions unanimously deemed relevant**

Figure 2.3 Analysis of identified contributions
Challenges:

- Instructing co-raters
- (Inter-)rater reliability
- Discussing results

Opportunities:

- Showing objectivity/reliability of judgments
- Thinking ahead: provides basis for article categorization
Review Fatigue
[6] Article Categorization

Analysis revealed four main categories:

1. Argumentation theory
2. Discourse analysis
3. Medical informatics
4. Medical ethics

HUMANITIES

MEDICINE

Based on main research interest displayed

Theoretical framework used

Journal of publication

Author (affiliation)

35% 35% 12% 18%
## [6] Article Categorization

<table>
<thead>
<tr>
<th>Category</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Argumentation Theory:</strong></td>
<td></td>
</tr>
<tr>
<td>Pragma-dialectics</td>
<td>Brashers et al. (2006); Goodnight (2006); Goodnight &amp; Pilgram (2011); Labrie (2011); Pilgram (2009; 2011); Rubinelli &amp; Schulz (2006); Schulz &amp; Rubinelli (2006; 2008); Snoeck Henkemans (2011)</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Bigi (2011); Walton (1985)</td>
</tr>
<tr>
<td><strong>Discourse Analysis:</strong></td>
<td></td>
</tr>
<tr>
<td>Conversation analysis</td>
<td>Ariss (2009); Drass (1982); Drew et al. (2001); Peräkylä (1998)</td>
</tr>
<tr>
<td>Rhetorical analysis</td>
<td>Knight &amp; Sweeney (2007); Segal (1994; 2007; 2008)</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Aronsson &amp; Sätterlund-Larsson (1987); Brown et al. (2011); Feng et al (2011); Steihaug et al. (2011)</td>
</tr>
<tr>
<td><strong>Medical Informatics:</strong></td>
<td></td>
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<tr>
<td>Diagnosis</td>
<td>Upshur &amp; Colak (2003); Shankar et al. (2006)</td>
</tr>
<tr>
<td>Treatment</td>
<td>Dickinson (1998); Grasso et al. (2000)</td>
</tr>
<tr>
<td><strong>Medical Ethics:</strong></td>
<td></td>
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<tr>
<td>Patient autonomy</td>
<td>Barilan &amp; Weintraub (2001); Sandman &amp; Munthe (2010); Savulescu &amp; Momeyer (1997); Smith &amp; Pettigrew (1986); Walseth &amp; Schei (2011); Wirtz et al. (2006)</td>
</tr>
</tbody>
</table>
Challenges:

- Overcoming fatigue: finding a creative angle
- Extracting meaning from the data

Opportunities:

- Making sense out of findings
- Establishing opportunities for future research
- Determining practical implications
- Possibilities for a new model/theory

Status:
Article has been written, prepared for submission to *Health Communication* and the NCA 98th Annual Convention.

Main findings:
- Publications that discuss the role of argumentation (theory) in medical consultation are **scarse**
- Publications come predominantly from the **humanities**
- Research efforts are **rarely interdisciplinary**
- And almost **never quantitative** in nature (1 article)

Future directions:
- Theory-driven, interdisciplinary research with a focus on empirical reality
- Focus on relations between physicians’ argumentation and consultation outcomes

Challenges:
- Audience adaptation: Publication outlet
- Lengthiness of review papers
- Timeframe: new publications

Opportunities:
- Publication in a quality journal that counts for your Ph.D.
NOW GO BACK TO [1]
Dissertation Progress

Done so far:

- **Theoretical framework**: Conceptualizing medical consultation as an argumentative activity (Published in *Argumentation*, 2011)
- **Systematic literature review**: Assessment of state of research (Publication for *Health Communication* in preparation)
- **Peer-Group “AIRMAIL”**: Experiment with students on the effect of argumentation and SDM on consultation outcomes (Publication for *Patient Education & Counseling* in preparation)

Next steps:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Spring ’12</td>
<td>Development codebook: Operationalization physicians’ argumentation</td>
</tr>
<tr>
<td>Summer/Fall ’12</td>
<td>Experimental, video-based study: To assess the effects of physicians’ argumentation on consultation outcomes (using actual patients)</td>
</tr>
<tr>
<td>Winter ’12</td>
<td>Content analysis: To test the codebook, at the NIVEL 2013 Dissertation write-up</td>
</tr>
<tr>
<td>2013</td>
<td></td>
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</table>