



# Online Social Support: Benefits of an Interdisciplinary Approach for Studying and Designing Cooperative Computer-Mediated Solutions

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# Context (1) – Social support

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- **Activities related to giving some advices, some information, or emotional, psychological, or material support to people facing a difficult situation**
  - **Usually provided by relatives, friends, family, or, for a professional version, by experts**
  - **Actual social demand due to:**
    - The diminishing of the social link
    - The increasing of remote coverage
    - The lacks of traditional medical system to follow heavy pathologies
  - **New phenomenon on the Internet: social support provided by peers, mostly by using forums**
- ➔ **How could a support provided by unknown people be useful?**



## Context (2) – Existing studies on computer-mediated social support

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- **Studies coming under social or experimental psychology, medicine, computer-mediated communication, and computer science**
- **Observed situations: Medical questions, social support provided to sick people or their relatives**
- **Focused on benefits and drawbacks**
- **Identified lacks:**
  - **Methodological weakness when analyzing social support situations**
  - **Low conceptual level when defining social support**
  - **Poor level of innovation when designing computer-based functions for assisting social support practices.**



# Research issues - Improving computer-mediated social support studies on three dimensions

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## Methodological:

- Combining social sciences and computer science through an action-research process
- Modeling an activity (social support) which is difficult to describe

## Conceptual:

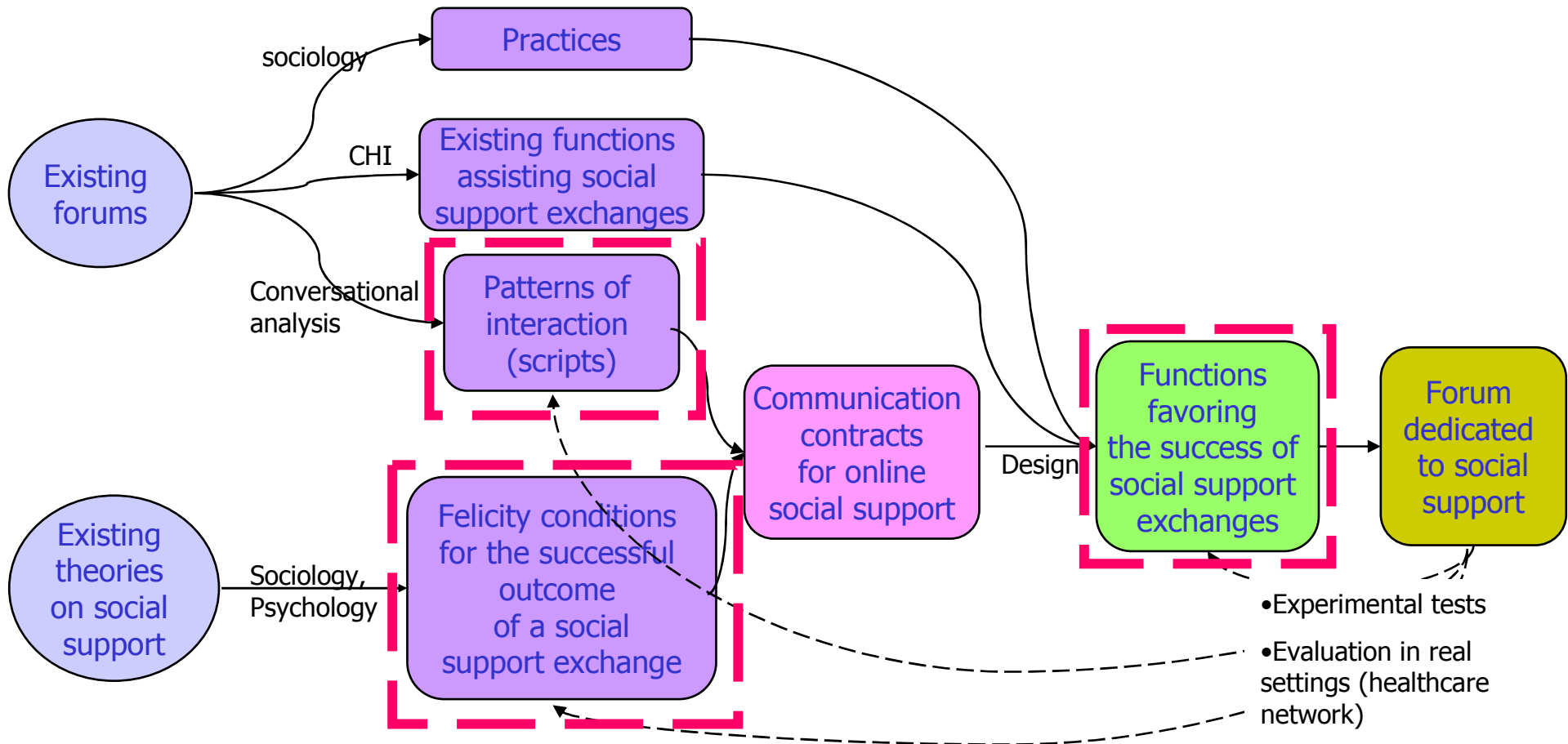
- Describing and understanding finely computer-mediated social support activities
- Defining a model of computer-mediated social support which would be theoretically founded *and* empirically tested
- Defining the role of “Web 2.0” technologies in the rise of new interactive practices

## Instrumental:

- Developing innovative online services dedicated to social support



# MISS: an interdisciplinary approach





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# Conversational Analysis: Definition of a Script

- Analysis of an example of experience sharing (taken from the French online forum Doctissimo)
- Definition of a script: the underlying interactional pattern of the exchange
  - Identification of the sequential structure and the speech acts which permit the achievement of an exchange mutually ratified by the discussants

The screenshot shows the Doctissimo website interface. At the top, there are navigation links: Mon Doctissimo, Annuaire des Doctinautes, News, Mail, Albums photos, Annonces, Doc TV. Below this is a horizontal menu with categories: Santé, Médicaments, Grossesse Bébé, Psychologie, Nutrition, Bonité Mode, Forme Sport, Sexualité, Cuisine, Environnement. A secondary menu lists various health topics: Immunisation et sang, Allergies, Cancer, Cholestérol, Contraception, Diabète, Eczéma, Herpès, Incontinence, Jambes lourdes, Mal de dos, Maux de ventre, Phytothérapie, Pipi au lit, Rhumatismes, Santé dentaire, Stress. On the left, there is a search bar and a sidebar with categories like 'Drogues et dépendances', 'Guide Conso', and 'Services'. The main content area is titled 'Forum santé' and contains a thread of posts. The first post is by 'eliececile' dated 10-04-2008 at 14:37:52, with the text: 'bah oui mais tu viens d'en recréer alors maintenant c'est résolu'. The second post is by '-labiche-' dated 10-04-2008 at 17:11:11, with the text: 'lol!'. The third post is by 'cyrano4' dated 11-04-2008 at 10:39:19, with the text: 'èh oui alors je commence (un nouveau post commence)'. The fourth post is by 'eliececile' dated 11-04-2008 at 10:39:42, with the text: 'lol cool !!!'. The website also features a 'TOUT PARTOUT.com' banner and a 'Recherche' section on the left.



# Script of an exchange of experience sharing

<b>Initiative message (A)</b>	<ul style="list-style-type: none"><li>• Opening (greetings,...)</li><li>• Pre-request<ul style="list-style-type: none"><li>– Description (A and his/her problem)</li><li>– Narrative (How A tries to solve this problem)</li></ul></li><li>• Explicit formulation of the request (experience sharing)</li><li>• Closing (greetings, wishes,...)</li></ul>
<b>Reactive message (B)</b>	<ul style="list-style-type: none"><li>• Opening</li><li>• Experience sharing<ul style="list-style-type: none"><li>– Description (B and his/her problem)</li><li>– Narrative (How B tries to solve this problem)</li></ul></li><li>• Closing</li></ul>
<b>Evaluative message (A)</b>	<ul style="list-style-type: none"><li>• Opening</li><li>• Thanks</li><li>• Support in return</li><li>• Closing</li></ul>





# Psychological and social conditions of felicity of the script

<b>Display of coping strategies</b>	<ul style="list-style-type: none"> <li>• Opening (greetings,...) <i>Initiative message (A)</i></li> <li>• Pre-request             <ul style="list-style-type: none"> <li>– Description (A and his/her problem)</li> <li>– Narrative (How A tries to solve this problem)</li> </ul> </li> <li>• Explicit formulation of the request (experience sharing)</li> <li>• Closing (greetings, wishes,...)</li> </ul>	<b>Gift counter-gift</b>
<b>Intelligibility of the request</b>	<ul style="list-style-type: none"> <li>• Opening <i>Reactive message B</i></li> <li>• Experience sharing             <ul style="list-style-type: none"> <li>– Description (B and his/her problem)</li> <li>– Narrative (How B tries to solve this problem)</li> </ul> </li> <li>• Closing</li> </ul>	<b>Rituality</b>
<b>Reciprocity</b>	<ul style="list-style-type: none"> <li>• Opening</li> <li>• Thanks</li> <li>• Support in return</li> <li>• Closing <i>Evaluative message (A)</i></li> </ul>	<b>Familiarity regime</b>





## Implications for Design (for instance...)

Felicity condition	Needs	Design Implication
Self-disclosure episodes	Emphasizing the narrative dimension	Private diary to tell problems in a more personalised way than with standardised form
Reciprocity	Encourage reciprocity between users	Alert features to be easily up to date of new contributions. Contributors could keep a personal log about their problems, e.g. <i>n-joy2's diet log</i> , with which other users can follow the case evolution in subscribing to it
Expressing emotions	Encourage and ease the emotional support	Dedicated set of smileys relative to social support, e.g. [:hug:], [:comfort:], [:metoo:]



# Discussion

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- **Novelties:**
  - Collaboration between social sciences disciplines (psychology, sociology, conversational analysis) and computer science all along the analysis and design process (instead being limited to the upstream or the downstream of the design process)
  - Needs analysis based on the confrontation between theories and real exchanges (instead of end-users interviews)
  - Conversational analysis permits to have a fine-grained description of the real activity. But it is too fine-grained for designers. The intervention of psychology and sociology permits to select what is central in social support activity and then on what we can focus for designing functions assisting social support.
- **Risks**
  - Social and human sciences are descriptive → could be very unfamiliar to be involved in a modeling and designing process which is more prescriptive.
  - We have to attend to the compatibility of the concepts coming from different disciplines, and which are not dedicated to the same level of analysis.
  - The transition from concepts to technical features has to be well-controlled so that the concepts keep being used in an appropriate way.



## Conclusion

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**If we manage these risks and overcome these difficulties, the MISS approach will permit to:**

- **Make social sciences contributions guide the instrumentation of social practices**
- **Understand (theoretically and empirically) the role of a technical artefact in social practices**
- **Explore theoretical questions in each discipline involved in the process.**



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# Questions...