# Eating disorders in the social web an ego-network analysis approach

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#### Outline

- Introduction
- 2 Literature
- 3 Empirical approach
- 4 Conclusions

#### The "pro-ana" and "pro-mia" Internet movement

- A controversial subculture: advocacy for anorexia and bulimia nervosa on the web.
- Challenges medical and psychological wisdom: anorexia as a lifestyle.
- But also, mutual support and advice to fellow sufferers.



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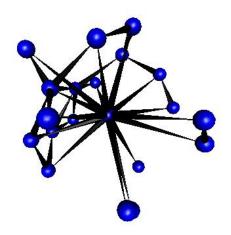
# A challenge for researchers

- How to study this social phenomenon?
- How to devise suitable public health tools and communication policies?



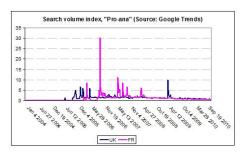
## A social networks approach

- Ongoing project ANAMIA: a social networks approach to "ana-mia" sociability.
- Focus is on online vs.
  offline personal networks
  of "ana-mia" website
  users
- Goal is to understand effects on health and eating behaviours.



## The study

- Comparative study of ana-mia subjects in UK and France;
- Mixed methods: quantitative, qualitative, simulation;
- Multi-disciplinary: social science, economics, philosophy, law, computer science.



#### ANAMIA in practice













- PI: C. Fishler, CNRS Paris;
- Funded by the French Agency of National Research (ANR).
- 5 teams.

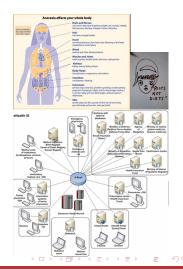
## A new role for the SSH in the study of eating behaviours

#### Before Internet:

- Clinical approaches dominant;
- SSH counterpointed development of health sciences mainstream.

#### Internet:

- 60 articles on "ana-mia" phenomenon (2000-2010);
- SSH play a major role in defining the field;
- Health sciences follow suit:
- Role of SSH in study of health with ubiquitous computer-mediated interactions.



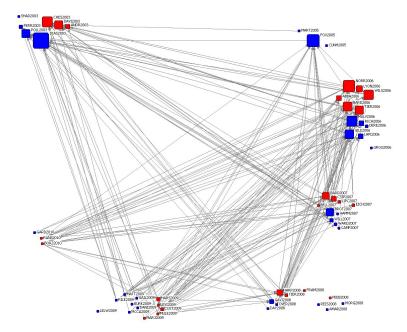


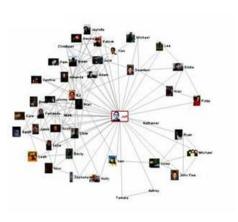
Figure: Network of citations highlighting the development of the body of literature over a decade. Red = clinical, blue = socio-cultural approaches. Node size is proportional to number of citations.

## New challenges ahead

- So far, mostly content analyses; rare active data collections (surveys, experiments);
- No conclusive evidence on the health impact of pro ana/mia websites;
- Online social networking remains to be addressed.

# Today's presentation

- Today, focus is on design of the empirical study;
- We aim to reach ana-mia website users and question them;
- Data collection just started (French part; English version will follow);
- Emphasis is on fieldwork methodology, dataset construction, test results.





# The challenge of interrogating ana-mia subjects

- Ana-mia population is difficult to reach:
  - Small size;
  - Vulnerabilities (health risk; underage);
  - Frequent migrations.
- Large quantitative surveys / webcrawling possible only to an extent;
- Need to rely on smaller-scale, purposive samples.

#### Our approach

- Web-based survey with participant-aided sociogram drawing tool;
- For current users of eating disorder-related websites, forums, blogs etc.;
- Questions on online and offline personal networks, and health-related advice network;
- Subsequent in-depth interview for a sub-sample of respondents.





#### Questionnaire structure

Four "classical" questionnaire sections with questions on:

- Basic indicators;
- Socio-economic indicators;
- IT usage;
- Health, weight, and body image.

Name generators.

[Insert Interface here]

[Insert first page of questionnaire here]

#### Name generators with participant-aided sociograms

- Two name generators for personal ties (very general):
  - Offline ties (family, friends, schoolmates, colleagues, etc.);
  - **Online** ties (connections through email, MSN, social networking sites, forums etc.);
  - The two may overlap, in part or in full.
- An extension of the name-generator method with real-time visualization, adapted for computer-based use.

[Insert example of an offline ego network as can be designed by a  $\mathsf{participant}]$ 

[Insert example of an online ego network as can be designed by a participant.]

#### Name generator for health advice ties I

Finally, we ask respondents whom they would like to speak to in case of:

- For one (randomly selected) group of respondents: serious health condition (go to hospital);
- For others: mundane issue (hair loss).
- They choose from among the list of contacts already mentioned, both offline and online, and may add new names;

## Name generator for health advice ties II

- Goal is to understand who may affect their health and nutrition behaviours;
- Key issue is relative importance of online vs. offline ties.
- Effects of social web on health to be deduced on this basis.

#### Conclusions

- We hope to gain insight into motivations and behaviours of ana-mia subjects;
- To understand impact of online social interactions on health, and difference from non-web interactions;
- Possible extensions to social dimensions of other health issues;
- Aim to draw implications for health policy campaigns.

#### Thank you!

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