

Self-Generated Versus Imposed Tasks in Collaborative Search

Robert Capra
Beth Sams
Paula Seligson

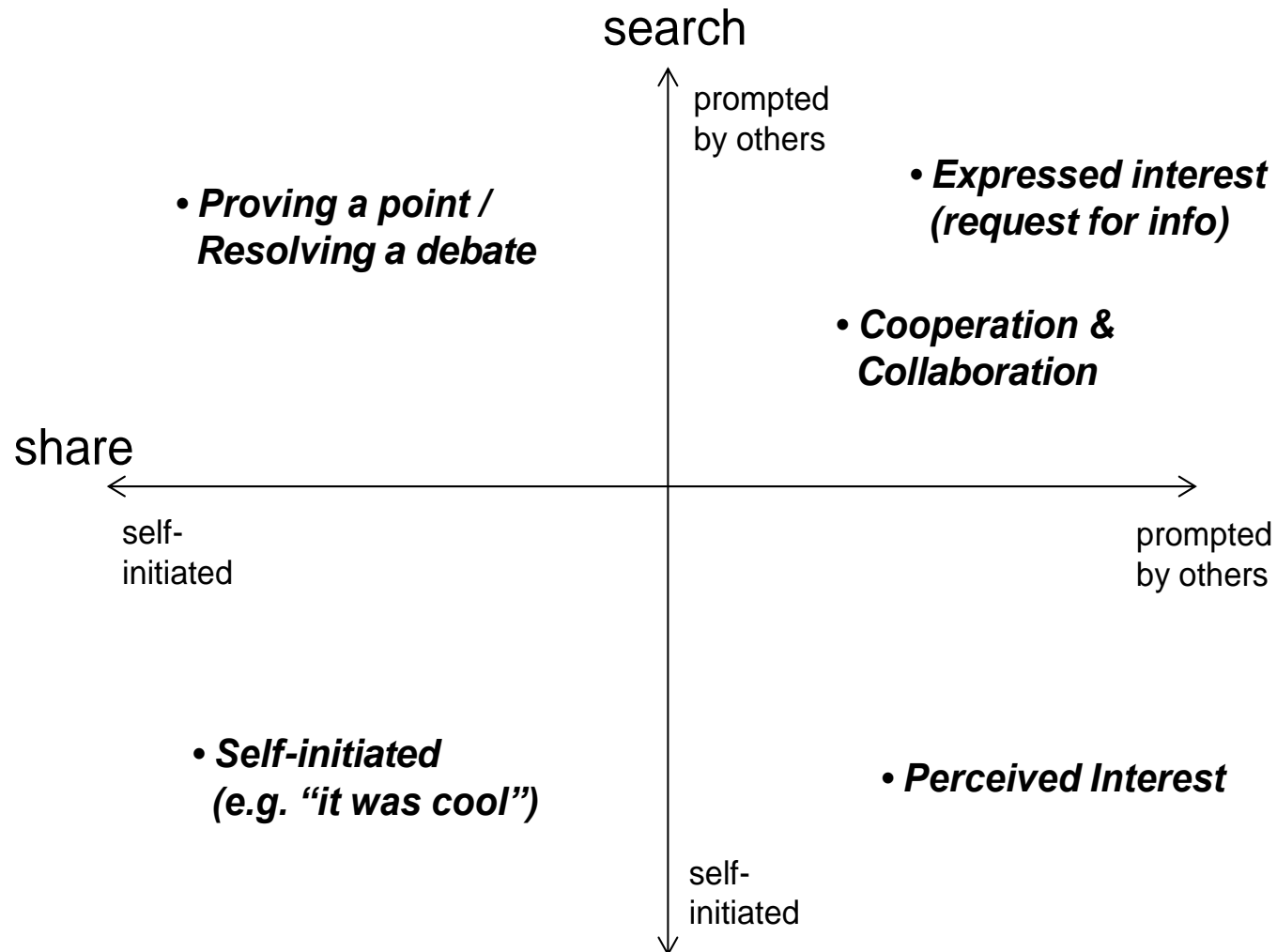
Collaborative Information Seeking
ASIS&T 2011 Workshop
October 12, 2011
New Orleans, LA



UNC
SCHOOL OF INFORMATION
AND LIBRARY SCIENCE

- **Self-initiated sharing**
 - “Because I thought it was cool”
- **Perceived interest**
 - “We were discussing this earlier”
 - “He is an avid golfer as well”
- **Expressed interest**
 - “She asked for the information
 - “To help her with the paper.”
- **Explicit collaboration**
 - “We were looking to buy a new phone and we wanted some information”
 - “We were working on a project”

Two self/others dimensions



- “...people are seeking information not because they have identified an information need themselves, but because they have been set on that course by another. The information need or question he or she wishes to answer is not his or her own in the sense that it was generated in his or her own mind or out of the context of his or her own personal life. Rather, the question has been imposed upon him or her by someone else.”
(Gross, 1995, p. 236)

- 25% of library reference desk queries
 - Gross & Saxon, 2001
- 33% social searches
 - Evans and Chi, 2008

- Imposed rated library ref higher (Gross, 2002)
- Kids used greater variety of sources for imposed (Gross, 1999)
- Kids preferred & more successful at self-gen (Bilal, 2002)
- More use of “direct” and “safe” strategies for imposed (Thatcher, 2006)
- Less interaction with others for self-generated (Evans & Chi, 2008)

- Lab study, 12 pairs of undergraduates
- Sync, collab search using Coagmento + our mods
- Communicate via chat & shared bookmarks
- Work on each task as long as wish

Task type	Task description
Transactional	What is the URL that would let you add a KitchenAid 3-speed blender to your shopping “bag” on the Kohl’s website?
Fact-finding	What is a prime factor?
Exploratory: collecting	Research for a report on the effects of childhood obesity in the U.S for a class on public health.
Exploratory: decision/planning	Find activities you would like to do on a spring break trip to Tucson, AZ (chosen since it would be an unfamiliar city to our participants)

- Self-generated task chosen by the participants
- At sign-up time, each pair was asked to think of a short list of topics or tasks
- At the time of the study, each pair decided on their topic

- 1 & 2
 - fact-finding
 - transactional tasks
- 3 & 5
 - The self-generated task
- 3&4 or 4&5
 - exploratory collecting
 - Exploratory planning/decision

- Engagement

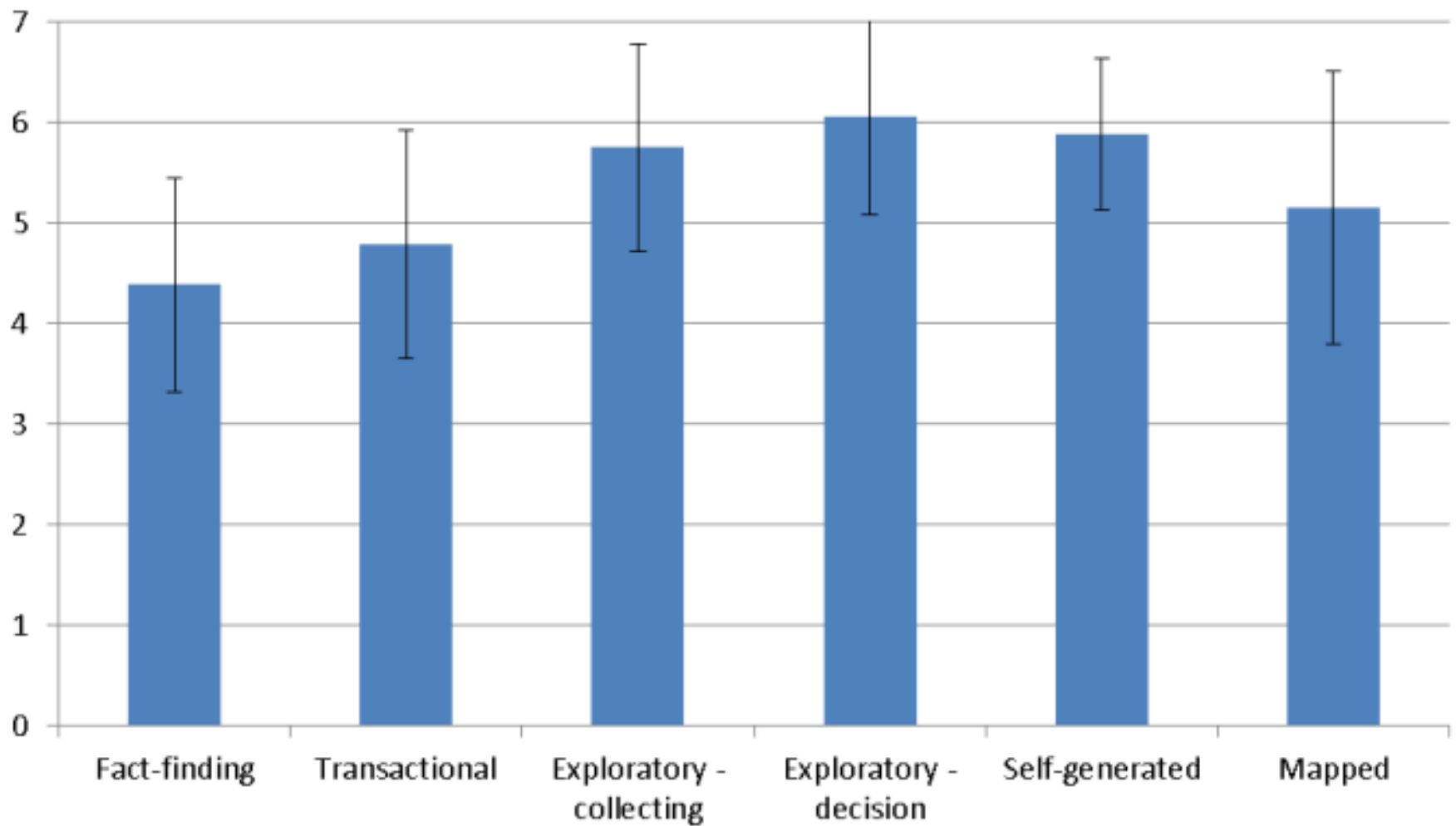
How you felt when you were completing the task

Not absorbed intensely	○ ○ ○ ○ ○ ○ ○ ○	Absorbed intensely
Attention was not focused	○ ○ ○ ○ ○ ○ ○ ○	Attention was focused
Did not concentrate fully	○ ○ ○ ○ ○ ○ ○ ○	Concentrated fully
Not deeply engrossed	○ ○ ○ ○ ○ ○ ○ ○	Deeply engrossed

- Additional measures of
 - time on task
 - use of division of labor
 - Enjoyment
 - use of the chat log
 - number of problems encountered

- Since only one self-generated task, it could be confounded with task type (fact-finding, transactional, exploratory collect, exploratory planning)
- We mapped the one self-gen task to one of the four imposed tasks for comparison

Engagement



- An independent-samples t-test showed a significant difference in the engagement
 - self-generated (M=5.89, SD=0.76), and
 - mapped (M=5.16, SD=1.36) tasks
 - $t(46) = -2.29, p = 0.03$
- The participants felt more absorbed on the self-generated task than on the mapped task.