



Deliberating Nanotechnologies in the US: Gendered Beliefs about Benefits and Risks as Factors in Emerging Perception and Participation

2009/2010 Study: Gender, Risk, and Equitable Participation¹

Six deliberative workshops were conducted in Fall 2009 in Santa Barbara, CA. Workshops focused on dialogues about nanotechnology in (1) energy and other environmental applications, and (2) health and human enhancement applications.

- The workshops varied gender composition systematically to allow for a comparative analysis of gender and risk perception.



Preliminary Results:

- Similar findings to 2007 study: greater perceived benefits over risks, but dependent upon application context.
- Strong gender effects, with women more cautious than men about forming risk vs. benefit judgments.
- Concern about equal access, fairness, and distribution.
- Concern about governance: distrust in U.S. government and corporations to responsibly manage nanotechnology.
- Strong interest in “informed public consent” of nanotechnology usage.

2009/2010 Study: Methods

- Formal and self-directed learning were incorporated through Powerpoint presentations and World Café-style small group discussions.
- Participants were selected to match local demographics.
- Two co-facilitators, plus one “expert” CNS science fellow moderated the discussion and facilitated the world cafés.



- Small group size suitable for focused discussion-based interaction (n= 9-13)
- Pre-tests and post-tests to measure attitude change and changes to risk perception, pre and post-workshop.

Comparative Analysis to 2007 Study²

Comparative analysis with our 2007 US workshops will allow depth analysis of changing views about benefits and risk.

- Four parallel deliberative workshops were conducted in February 2007, two in the US and two in the UK. Workshops focused on dialogues about nanotechnology applications in either energy or health & enhancement.

¹Harthorn, B.H. (Fem Studies, UCSB), Rogers, J.B. (Soc, UCSB), Shearer, C. (Soc, UCSB), Martin, T. (Chem, UCSB), Hurt, I. (Geog, UCSB). 2010. *In Progress*. NSF SES-0824042 and NSF SES-0531184

²Pidgeon, N. (Cardiff), Harthorn, B.H. (UCSB), Bryant, K. (SUNY-NP), & Rogers-Hayden, T. (U East Anglia). 2009. “Deliberating the Risks of Nanotechnologies for Energy and Health Applications in the United States and United Kingdom.” *Nature Nanotechnology* 4(2): 95-98.