

1st European Gender Summit

www.gender-summit.eu

Promoting scientific excellence and
equality in science for women and men

Elizabeth Pollitzer, genSET

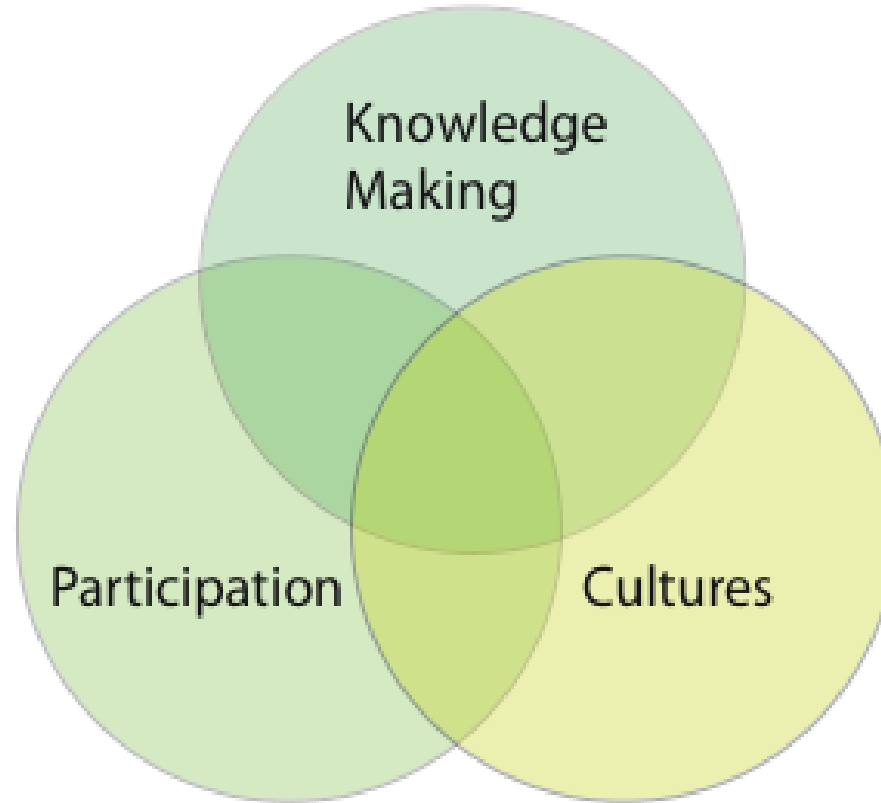
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genSET: www.genderinscience.org

- FP7 Science in Society project
- Raising awareness of **common gender problems** and building institutional capacity to solve these problems
- **>100 science** institutions involved across Europe
- **Dialogue:** scientists, gender research experts, policy makers
- **Science leaders' consensus** on the gender dimension in science
- Gender equality strategy + **13 evidence-based** (120 research reports) **recommendations for action**

How gender shapes equality and quality in science

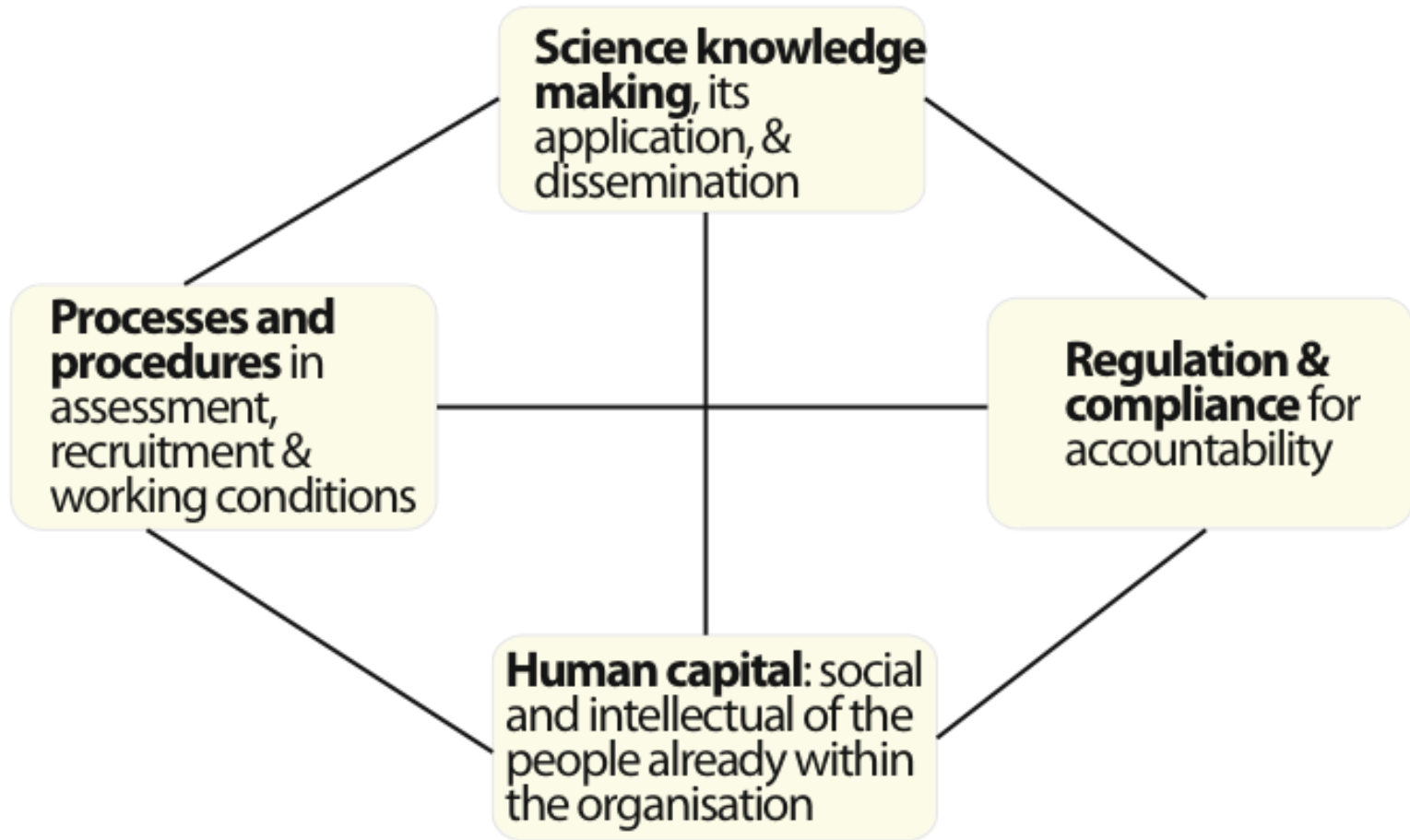


*Gender is a relationship between **biological sex** and **behaviour** governed by **social norms***

Common gender problems in science

- **Bias in knowledge making**, e.g. taking male body as the norm and women as derivation from that norm (anatomy, radiation, engineering etc)
- **Bias in research process**, e.g. assuming same impact for women and men (pain, cardio, vaccines, etc)
- **Bias in assessment and selection** of people and work, e.g. consistently scoring men higher than women ('excellent' vs 'good', quality stereotype)
- **Bias in the organisation of work**, e.g. undervaluing women's social capital and leadership styles (networks, committees, collective intelligence)

Gender equality strategy for science institutions



Gender Summit: Scientific Quality through Equality

- 8-9 November 2011, Brussels
- Patron: **Polish EU Council Presidency**
- Keynotes: Vice President **European Parliament**
- Day 1: Gender factors in **research** and **innovation**
- Day 2: Gender equality in institutional **practice** and **policy**
- **800 attendees**: science, policy, innovation, leadership, higher education
- **45 speakers**
- www.gender-summit.eu (register now)

Gender Summit: Key topics

- Actions to improve research excellence & process
- Actions to improve leadership and human capital
- Collaborative strength & intellectual advantage
- R&D and HR standards – mobilising and retaining talent
- Embedding gender in science curriculum
- Gender equality policies & legislation
- Integrated action on the gender dimension

Gender bias example: Pain and Speech

- Pain
 - Male rat model of pain (male rats are easier to look after in the lab than female rats)
 - Clinically tested on young male humans (quicker and less complicated)
 - Marketed to women (but women experience pain differently to men)
- Speech recognition
 - Early systems based on a model of male voice
 - Software tested on men (more men in the lab)
 - Marketed to women (but women's voice is different to men's)

Some known gender facts for ICT

- **Modelling** - women are NOT scaled down men
- **Medical imaging** – diagnostic accuracy is LOWER for women
- **Speech recognition** – gender specific acoustic models are better
- **Bio-sensors** – *electronic nose* – women and men have different smell signatures
- **Content** – women and men tag and search images differently
- **VR** – *cybersickness* worse in women than in men
- **E-society** – *Open Innovation*: women succeed more than men (www.innocentive.com)
- **Social networks** – Women create different connections and network structures to men

Other areas where gender factors may impact quality

- **Human-Computer Confluence**
 - Presence technologies
 - Visualisation
 - Virtual/augmented reality
 - Wearable computing
 - Brain-computer interfaces
 - Medical imaging
 - Speech recognition
 - Automatic translation

Other areas where gender factors may impact quality

- **Networks/Internet**
 - Situated communications
 - Bio-inspired networks
 - Security
 - Surveillance
 - Semantic web/ontologies
 - Search engines
 - Contents personalisation
 - User-generated contents
 - Web services
 - Social networking

Other areas where gender factors may impact quality

- **Information Society**
 - e-Society
 - e-Business
 - e-Governments
 - e-Environment
 - e-Learning
 - Green ICT

Areas of ICT gender/sex factors may be impact quality

- **Bio-ICT convergence** ('in body' technologies, brain implants, bio-informatics, bio-sensors)
- **Cognitive systems and robotics** (Artificial Intelligence, Synthetic Life, Machine Learning, Context awareness, adaptive systems, bio-inspired robots, humanoids)

Human development & ICT

- “There appears to be a general development assumption that the **supply of information** available through ICT global networks is sufficient to enhance the livelihoods of the poor, provided that the poor can access these networks – experience shows strong need for **content grounded in local realities**” (*infoGov, 2003*)
- “the Egyptian government reacted quickly: blocking social media sites and mobile phone networks before pulling the plug on Egypt's access to the internet.” (BBC News 9/2/2011)

Disconnect between traditional ICT and future ICT

- **Harvey Nash 2010 CIO Survey**
 - job satisfaction 2009: 69%, 2006: 88%
 - skills shortage 2009: 62%, 2008: 49%
 - key priority: **cost saving: 77%**
 - **innovation: 13%**

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Conclusions

- Gender impacts quality of research and science practice at three levels: participation, cultures and knowledge making
- The European Gender Summit will discuss core areas where addressing gender issues is needed for scientific excellence
- **ICT R&D, too, needs to become sensitive to gender issues** in order to make the Digital Agenda equally inclusive and relevant to women and men.

Thank You

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Register now!

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