Health and ICT Social Science Perspective

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Research Institute for the Applied Social Sciences

Theoretical angles

Examples

Ways forward

Research Institute for Applied Social Sciences (RIASS)

- The home of applied social science at Swansea University

- Cross-University collaboration bringing together Research expertise within the social, human, health and environmental sciences.

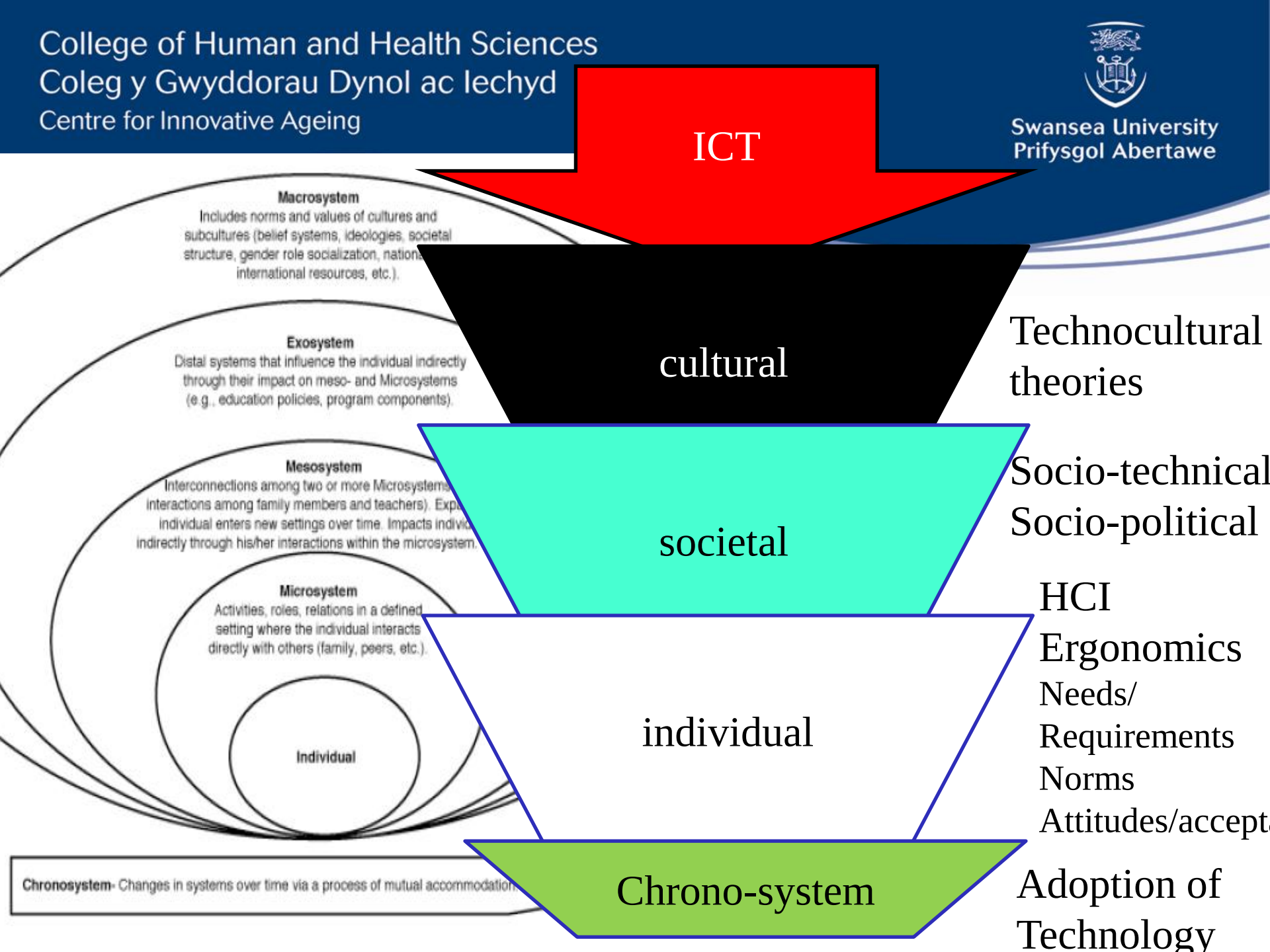
- Host of the Swansea arm of the ESRC Wales Doctoral Training Centre.

9 research centres

- **Centre for Migration Policy Research** (Professor Heaven Crawley)
- **Swansea Centre for Health Economics** (Professor Ceri Philips)
- **Centre for Criminal Justice and Criminology** (Professor Kevin Haines)
- **Centre for Innovative Ageing** (Professor Ness Burholt)
- **Global Drug Policy Observatory** (Dr. David Bewley-Taylor)
- **Wales Observatory on Human Rights of Children and Young People** (Jane Williams and Dr.Simon Hoffman)
- **Welsh Economy and Labour Market Evaluation and Research Centre** (Professor David Blackaby)
- **Language Research Centre** (Professor Nuria Lorenzo-Dus)
- **QUEST - Qualitative Enquiry Supporting Trials** (Professor Frances Rapport)

SCHE Swansea Centre for Health Economics
Research Led, Analysis Driven, Real World Perspective

Theoretical angles



ICT
Macrosystem
Includes norms and values of cultures and subcultures (belief systems, ideologies, societal structure, gender role socialization, nation
international resources, etc.).
Exosystem
Distal systems that influence the individual indirectly through their impact on meso- and Microsystems (e.g., education policies, program components).
Mesosystem
Interconnections among two or more Microsystem
interactions among family members and teachers). Exp
individual enters new settings over time. Impacts indivi
indirectly through his/her interactions within the microsystem.
Microsystem
Activities, roles, relations in a defined setting where the individual interacts directly with others (family, peers, etc.).
Individual
Chronosystem- Changes in systems over time via a process of mutual accommodation
cultural
societal
individual
Chrono-system
Technocultural theories
Socio-technical
Socio-political
HCI
Ergonomics
Needs/ Requirements
Norms
Attitudes/accept
Adoption of Technology

Research examples

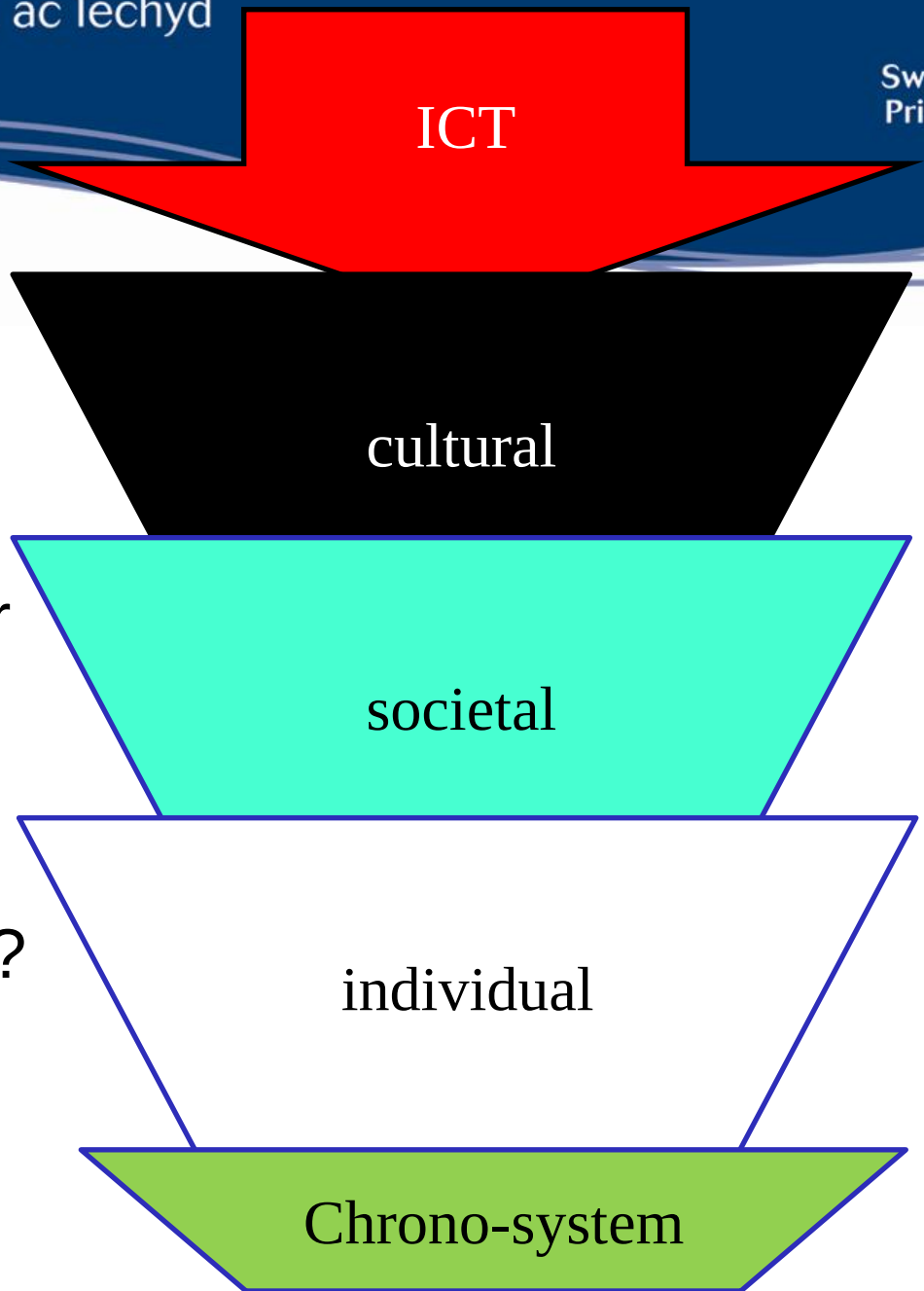
Teleworking:

1993 by 2010: 80% of office workers wold work from home/remotely

Telehubs etc. (AT&T, 1993)

- Remove the need for physical/ literal/ corporeal travel
- Reduce need for workspace
- Did it happen? No?
- Why?
- Technology IS there and IS good quality.

- Socio-legal:- Risk, compensation, liability
- Group behaviour – control, trust
- Face to face – better – but why?
- Norms



Virtual Travel in later life

Swansea University
Prifysgol Abertawe

Potential

- Increase in technology and networking
- Increased accessibility
- Increased use – buying, talking, making friends, "visiting", watching, interacting
- Own time

"I will order stuff on the Internet rather than going to town to buy it, so I don't make that journey and it is just so much simpler on the Internet. Somebody else comes and drives and delivers it to your door (Male 60s)."

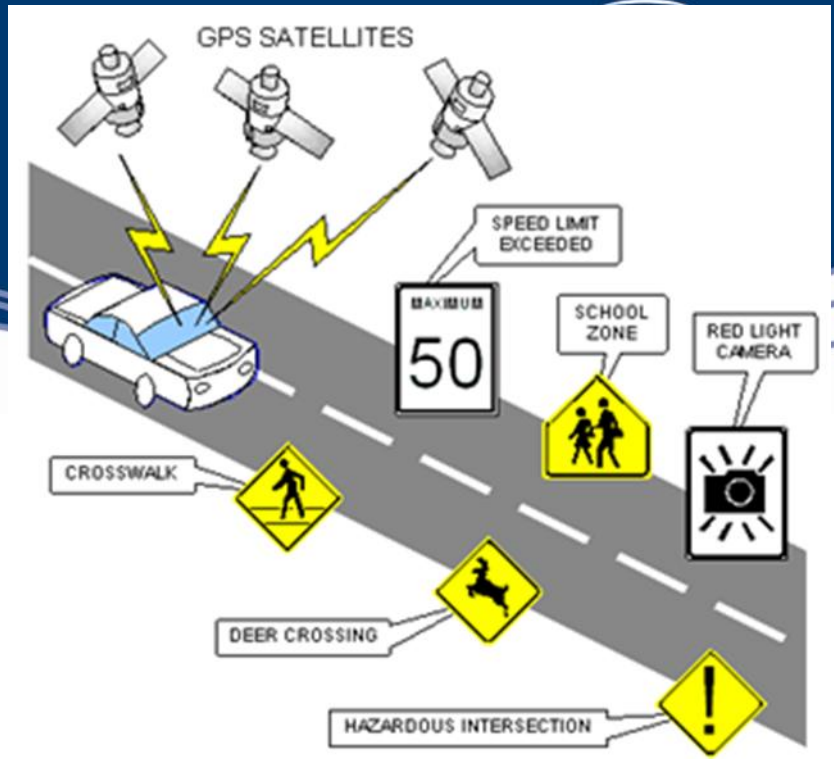
"I certainly see more of my grandson because of Skype (Female 60s)."

Challenges

- What is missing from the "virtual" world compared to "reality"?
  - Touch, smell, sense, continuity, impression managed, staged
  - Informal, random, chance meetings
- Equal access?

"If I couldn't get to places..., although I've got a computer, I would stagnate. Because I like the social aspect of things. And I like the different characters you come across and it stimulates your thinking and makes life worthwhile to be able to go out and meet others (Male 70s)"

Parkhurst, G., Galvin, K., Musselwhite, C., Phillips, J., Shergold, I., Todres L. (forthcoming) Beyond Transport: Understanding the Role of Mobilities in Connecting Rural Elders in Civic Society
in Hennesey, C., Means, R., Burholt, V., (Eds). *Countryside Connections: Older people, Community and Place in Rural Britain.* Policy Press, Bristol.



Advanced vehicle control and safety systems:

Promise we would be in self-driving cars by 2010 (e.g. Navlab, 1996)

- Did it happen?

- No?
- Technology IS there and IS high quality?
  - Been there since 1996
- Why hasn't it happened?

New technologies are voluntary
Any mandatory technology will need political will and hence public acceptability
Acceptability is related to (appropriate) uptake and (successful) use

TECHNOLOGY

- **relative advantage** (the extent to which it offers improvements over available tools),
- **compatibility** (its consistency with social practices and norms among its users),
- **complexity** (its ease of use or learning),
- **trialability** (the opportunity to try an innovation before committing to use it),
- **observability** (the extent to which the technology's gains are clear to see).

PERSON

- **Background characteristics** (age, gender, socio economic background),
- **Cognitive style** (how information is processed),
- **Attitudes** (towards technology, towards related items),
- **Personality** (need for achievement, degree of defensiveness, locus of control, and risk-taking propensity),

Changes over time – Innovation Diffusion (Rogers, 1995)
Technology / Person interaction

- Nanotechnology for health in later life
- Great potential for nanohealth to impove the health and wellbeing of older people
- But awareness and acceptability of emerging nanotechnologies is lower than other age groups (Bossard & Nisbet, 2007; Ho, Brossard & Scheufele, 2008)
- Especially low amongst those from multiple marginalities (Beech, Cobley, Musselwhite & Phillips, in preparation)
- Will this have an effect on uptake?
- Nanodivide within the Western World?

Taylor-Whilde, Tenge, Nash et al.

OPAN funding to look at:-

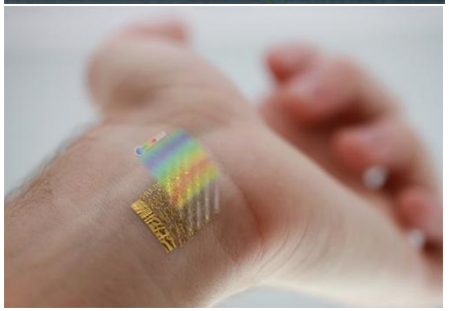
- Can a remote monitoring nano-technology patch measuring vital signs such as oxygen saturation levels; temperature, hydration and blood glucose levels prevent patient deterioration in older patients with dementia at home and reduce GP consultations, admission to acute care and length of stay?

Individual level

- Can such a device be worn by the patient comfortably without allergy and for a reasonable length of time? Can the device be worn during Activities of Daily Living (ADL) such as bathing?

Social and cultural levels

- What are the behavioural and cultural changes necessary in order to adopt such technology within the NHS and how do we accelerate such adoption?



Ways forward

- Much funding streams are moving towards research that solves societies problems
- Especially EU

- Engineering and technology can only do so much
- Need to understand the user and the social context within which technology is used
- Need for the social sciences to work with engineering and technology at a variety of levels
  - Individual
  - Social
  - Cultural

Do get in touch....

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