

### Knowledge Exchange Seminar Series (KESS)

...is a forum that encourages debate on a wide range of research findings, with the overall aim of promoting evidence-based policy and law-making within Northern Ireland



### The Cohesiveness of Technology in Later Life: Findings from the Technology In Later Life (TILL) Project

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14 March 2018



Iton Keynes



The Open University

# **Presentation Overview**

- Global Ageing
- Statistics in Northern Ireland
- Why is the TILL project important?
- What is the TILL Project?
  - Aims & Objectives
  - Study Sites
- Methods & Ethics
  - Sample
- Results
  - Data
  - Voice of Older adults
- Conclusions & Implications
- Policy Recommendations





# Ageing in Northern Ireland

### 2006-2016

- 36,500 people aged <u>85+</u> years or 2% of the population
- 2/3 of women (66.8%) account for those 85+ years
- Population increase of men in this decades has been higher than women 52.0% & 27.7% respectively
- Approx 12,500 people aged <u>90-99</u> years (30<sup>th</sup> June, 2016)
  - In 2006 76.3% for females & 23.7% men
  - Females = 71.7% (n=8,900)
  - Men = 28.3% (n=3500)
- Approx 278 people aged <u>100+</u> years (30<sup>th</sup> June, 2016) and 86.7% were female.
  - Since 2006, centenarians have double (nearly), mainly women

Source: NISRA Statistical Bulletin, 27.09.2017: Estimates of the population aged 85 and over, Northern Ireland 2016 (and revised 2001-2015)





# Why is the TILL project important?

- Explore & understand the differences between different countries, cultures & regions/provinces
- Explore & understand the impact ICT has on geographic locations
- Paucity in the literature of ICT & the wider socio-technological issues
  - Social isolation, social engagement
  - Enhance intergenerational relationships
  - Digital (health) literacy, Active, Healthy, Ageing (AHA)
  - Collect baseline data to form larger database(s), longitudinal analysis
  - Add to the literature: Gerontology, Social Sciences, Human Computer Interaction (HCI)





# Aims & Objectives

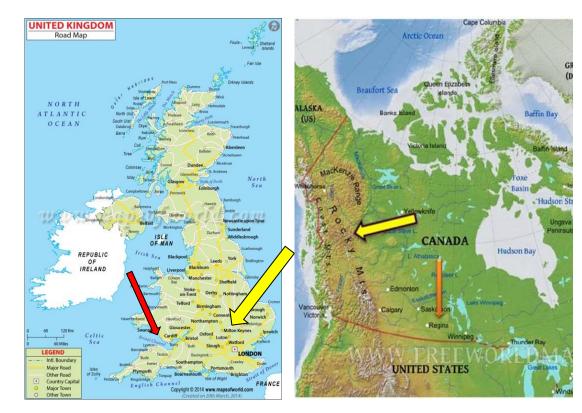
- To explore & understand ICT use across geographic locations
  - Rural & suburban sites
- To explore the behaviour, barriers & enablers of ICT by adults aged 70+ years
- To explore ICT impact across different locations and age
- Contribute to the literature in the fields of gerontology, social sciences, and HCI
- Assist with framing guidelines/frameworks with policy makers



# **Study Sites**

#### 2 Countries

- United Kingdom
- Canada
- 4 sites:
  - Rural (South Wales, McBride)
  - Urban (Milton Keynes, Regina)







# Sample

### Canada

- Rural Mcbride: n=10
- Urban Regina: n=6

### UK

- Rural South Wales: n=10 •
- Urban Milton Keynes: n=11

|  | Total Population                               |  |  |
|--|--|--|--|
| Age<br>Mean Age ± SD<br>Age Range (n)  | 77.4 (6.4)<br>67-89                            |  |  |
| <b>Gender</b><br>Female<br>Male  | 67.6 (25)<br>32.4 (12)                         |  |  |
| Employment Status<br>Not employed/retired<br>Currently employed                    | 86.5 (32)<br>13.5 (5)                          |  |  |
| Health Status<br>Somewhat unhealthy<br>Neutral<br>Somewhat healthy<br>Very healthy | 5.4 (2)<br>29.7 (11)<br>43.2 (16)<br>21.6 (8)  |  |  |
| Marital status<br>Single<br>Married / have a partner<br>Widowed<br>Other           | 22.9 (8)<br>34.3 (12)<br>31.4 (11)<br>11.4 (4) |  |  |

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## Sample Continued – Rural & Urban

|  | Rural Sites (n=20)                   |                                      |  | Urban Sites (n=17)                           |   |
|--|--------------------------------------|--------------------------------------|--|--|---|
|  | McBride<br>(27.03%, n=10)            | S. Wales<br>(27.03%, n=10)           |  | Regina<br>(16.22%, n=6)                      | Milton Keynes<br>(29.73%, n=11)             |
| Age<br>Mean Age ±<br>SD<br>Age Range (n)   | 80.6 (6.5)<br>71-89                  | 74.4 (5.8)<br>67-84                  | Age<br>Mean Age ±<br>SD<br>Age Range (n)   | 77.2 (4.2)<br>70-82                          | 77.4 (7.3)<br>70-89                         |
| <b>Gender</b><br>Female<br>Male  | 80 (8)<br>20 (2)                     | 60 (6)<br>40 (4)                     | Gender<br>Female<br>Male   | 100 (6)                                      | 45.5 (5<br>54.4 (6)                         |
| Employment Status<br>Not employed/retired<br>Currently employed                    | 80 (8)<br>20 (2)                     | 100 (10)<br>-                        | Employment Status<br>Not employed/retired<br>Currently employed                    | 83.3 (5)<br>16.7 (1)                         | 81.8 (9)<br>18.2 (2)                        |
| Health Status<br>Somewhat unhealthy<br>Neutral<br>Somewhat healthy<br>Very healthy | -<br>10 (1)<br>70 (7)<br>20 (2)      | 20 (2)<br>40 (4)<br>20 (2)<br>20 (2) | Health Status<br>Somewhat unhealthy<br>Neutral<br>Somewhat healthy<br>Very healthy | 33.3 (2)<br>66.7 (4)                         | 36.4 (4)<br>27.3 (3)<br>36.4 (4)            |
| <b>Marital status</b><br>Single<br>Married / have a<br>partner<br>Widowed<br>Other | 20 (2)<br>30 (3)<br>30 (3)<br>20 (2) | 10 (1)<br>70 (7)<br>20 (2)           | Marital status<br>Single<br>Married / have a<br>partner<br>Widowed<br>Other        | 33.3 (2)<br>16.7 (1)<br>16.7 (1)<br>33.3 (2) | 27.3 (3)<br>9.1 (1)<br>45.5 (5)<br>18.2 (2) |

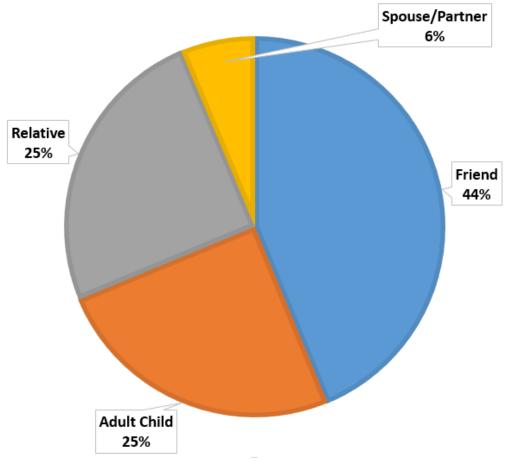


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## Learning ICT in Later Life





## Themes

#### **Positive Themes:**

- 1. Health & Technology Use
- 2. Internet & Infrastructure Use
- 3. Wearable Technologies
- 4. Using Technology for Safety Reasons
- 5. Learning & Sharing Information & Experiences relating to how to Use New Technology

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6. Communication & Interaction with Technology

#### **Negative Themes:**

- 1. Interaction, Engagement, Day-to-day Activities
- 2. Concerns about Using Technology

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- 3. Pressure & Apprehension of Using Technology
- 4. Communication, Interaction with Technology
- 5. Social Media, Communication with Technology
- 6. Privacy & Sharing of Information via Technology

Ulster University

# The Voice of Older Adults

### **Positive Perceptions:**

#### Health & Technology Use – Example 1:

Female: I do use the internet to search on health subjects. You can go on, as you say, I use that too, the Mayo Clinic and I use the sites, the National Institute of Health in the US. Well that's because that's what I am familiar with, you know, when I lived there. But I wouldn't go on to some of these forums that you were talking about. They are not very reliable, and they are just people expressing their views. You want evidence to support what is being said.

#### Internet Use & Infrastructure – Example 2:

Participant 2: [...] But that is it and I just basically use it as a nice portable machine that I can take with me and have lots of information and access to the internet. Because for the longest time I was on dialup and doing these daily emails until about a year and a half ago I could finally get a connection through the new cell tower they put in two years ago. So I am on high speed now. It is not really high, high high speed like you would get in the city but it is like 500 times as fast as dialup was. [McBride, Canada]

#### Perception of Wearable Technologies – Example 3:

**Female:** "Well I personally wouldn't mind one of these, where can you get the Fitbit? No I am being honest now, and I'm quite prepared to share, I do have a mobility problem and I do walk very slow. But I would like to know how many steps I am doing a day, so therefore what can I do to improve? Is it a case of getting in the pool maybe and trying to swim?" [Wales]



# The Voice of Older Adults

### **Negative Perceptions:**

Pressure & Apprehension of Using Technology

#### Example 1:

- Female: "People are being quite inextricably pushed towards using the internet. I mean I turned up at the doctors, only to pick up a prescription, which was unusual. And there was a notice up saying, "On December 1<sup>st</sup>..." And I had always ordered prescriptions online, through the prescription line. That was changing from December 1<sup>st</sup> it was changing to the National Health one, which is going...
- Female: It's rubbish, I can't get in on it.
- **Female:** In actual fact you had to turn over because there was no longer a telephone prescription line.
- Female: But that's in your surgery, it's not in mine." [Wales]





# The Voice of Older Adults

### **Negative Perceptions continued**

Privacy & Sharing of Information via Technology:

#### Example 1:

Male 2: "Facebook I went onto for a short period, but, like a complete wally, I didn't realise that unless you set up the privacy settings properly, everything you say is broadcast to the world. I fell out with my daughter quite badly over something [...] "Right, I'm coming off that," because there was so much garbage coming on." [Milton Keynes]

#### Example 2:

Participant 1: Yes. I think about it and I am very careful about opening things because you can get a virus or whatever. I try to be very careful and yes I am concerned about privacy.

That is one reason I do not, very seldom will I answer on Facebook. I read what goes on but I do not participate because of privacy.

- Facilitator: And what are you afraid might happen?
- Participant 1: Well you have to be very careful with your banking. I do do my banking online which I find very, very convenient. But I am always kind of concerned about that but I think, "Well there's so little in there that who'd be interested anyway." So I feel I am pretty safe. [McBride]





## ICT Differences between Rural & Urban

- Location of ICT use
  - <u>Rural</u> 30% more likely to use PCs in different locations (outside of the home)
- Rationale for ICT use
  - <u>Rural</u> 90% use social networking social connectedness with grand/children
  - <u>Urban</u> 100% use PC for email
  - <u>Urban</u> 70.6% use Internet to make a telephone call or 35.3% use Instant Message

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### Frequency of Social Media Use

• **<u>Rural</u>** – More frequently use

Queen's University Belfast



# Future Work:

- **Expand Regions & Countries** ۲
- **Increase Participant Numbers**
- Validate the ICT Survey ۲
  - Translate survey into other languages
  - Validate translated survey(s)
- Longitudinal Data Set(s)
  - Patterns of ICT Use
  - Identify Needs & Requirements
  - Monitor change over time





Assembly



## Conclusions

> Adults 70+ years embrace ICT, despite challenges

- ICT devices are used as a safety net by older adults
- ICT use was planned or foreseen by Adults 70+ years
- > Avoid assumptions about ICT use by older adults





# **Policy Recommendations:**

- Focus on the strengths & opportunities ICT can bring to individuals, communities & society
- NISRA should consider collecting data associated to ICT, Wearables, Internet & publish annual reports
- Training & Education Opportunities (age appropriate)
  - From peers (see slide 11)
- Create online support targeted at Adults (different needs, terminology)
- Engage with different age cohorts to ascertain the impacts of ICT & Technology use, behaviour & perception for future ageing populations
- Explore how intergenerational relationships work with older populations adopting and engaging with ICT (Olynick, Freeman, Marston, Musselwhite, Kulczycki, & Genoe (under review)).

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Explore how ICT does and would facilitate positive and successful Age in Place across Northern Ireland





## Thank you for your time

## **Questions & Answers**

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2<sup>nd</sup> Digital Health & Wellbeing Conference



1-3 May, 2018 The Open University, Milton Keynes <u>http://bit.ly/2xMSS0m</u> @DConf2018

#### Health & Wellbeing Priority Research Area

http://bit.ly/2xMSS0m

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