‘Social’ Care and Engagement of Older Adults

Design Issues and Research Questions in the Irish Longitudinal Study of Ageing (www.TILDA.ie)

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Structure of Presentation

- TILDA: Background and basic design
- Why is the ‘social’ component in TILDA important?
- Why is the ‘social’ component in TILDA challenging?
- Domains of ‘the social’
  - Social care
  - Social engagement: networks, integration, support
- Links between ‘social’ and ‘health’
- Key inter-disciplinary research questions
- Understanding the pathways: (Provisional) biomarkers, other key (psychological, behavioural) measurements
- (Potential) policy implications
TILDA: Background and basic design

- **Lack of information** / patchy information on older adults in Ireland
- **Diversity** of older population: large random sample (aged 50+), substantial numbers for sub-groups
- **2-yearly intervals** between waves but sub-groups (e.g. oldest old, those entering institutional care) and ‘experiments’ observed at greater frequency
- **Inter-disciplinary**: understand links between ‘health’ ‘economics’ ‘social
- Importance of comparability with SHARE, HRS, ELSA
Why is ‘the social’ in TILDA important?

Scientifically…

- Arguably the **least understood** aspect of ageing – new-ish area of scientific enquiry

- Diverse approaches have yielded plentiful evidence of **association between ‘social’ and ‘health’** (and ‘social’ and ‘wealth’) ---
Why is the ‘social’ in TILDA important?

‘The health risks associated with lower levels of social integration are comparable in magnitude to the risks associated with cigarette smoking, high blood pressure and obesity, and are still significant after controlling for these and other traditional risk factors.’

(Cohen, Underwood and Gottlieb 2000: 6)
Why is the social in TILDA important?

Socially integrated persons have been shown to be less likely to have heart attacks (Kaplan et al. 1988), less likely to develop upper respiratory illness when experimentally exposed to a common cold virus (Cohen et al. 1997) and more likely to survive breast cancer (Funch and Marshall 1983).
Why is the social in TILDA important?

In practical/policy terms…

- Obvious importance for ‘successful ageing’
- Identify strengths in the social environment in Ireland
- Identify problems
- Scope for interventions
Why is the ‘social’ component in TILDA challenging?

Conceptualisation, measurements

- Social participation, integration, networks, support, engagement, conflict, activity etc.
- **Variety in conceptualisation**, definitions; **Lack of established terminology**
- **Heterogeneity in methods and measurements** with obvious overlaps between both concepts and measurements (e.g. attending a social club: activity, network, support),
- Attempts to generate ‘broader’ measurements (terms that encompass multiple concepts include: ‘social engagement’, ‘social connectedness’)

Why is the ‘social’ component in TILDA challenging? *Cont.*

Complex interactions and association with ‘health’:

- All these concepts represent **different constructs**, often only **moderately correlated**
- Structural (network) and functional (support) measures NOT highly correlated; should **compare** predictive ability of structural and functional measures with respect to health outcomes in the same pop.
- **Associated with mortality, morbidity and survival**
- Association between ‘social engagement’ and mortality/morbidity probably **more complex than a unilateral cause-effect relationship**
Why is the ‘social’ component in TILDA challenging? *Cont.*

Difficulty of unpicking what goes on in the ‘black box’ between social engagement and health:

- Precise pathways as-yet poorly understood
- Death a definitive state that is easily assessed…
- But *morbidity* (and recovery, survival) should be treated as a *progression* if we are to understand the etiologic processes involved in ‘translating’ ‘the social’ into ‘health’ or absence of health
Domains of ‘the social’

Two chief domains:

- **Social care**

AND

**Social engagement/ connectedness**: this consists of:

- **Social network** (structural characteristics)
- **Social integration** ((positive) engagement in relationships and activities)
- **Social support** (received and perceived)
- **Relationship quality** (negative aspects, conflict)
- **Social cohesion**
(Social) Care

= actual receipt and provision of tangible help (personal care, household chores, paperwork)

- Importance of establishing intensity, provider/recipient, (where relevant) source of financing

- Linked to ADL / IADL section and to ‘Inter-generational Transfers’ section (can measure both care that is ‘really needed’ and care that is more ‘social supportive’ in nature)
Main Research Questions on ‘Care’

(1) **Direction** of the flow of inter-generational transfers

(2) ‘**Exchanging**’ care for financial assistance, or vice versa?

(3) Health and economic **impact of care-giving**

(4) Expectations changing over time (or cohorts)?

(5) Expectations borne out?
Social Networks:
Structural Characteristics

**Kin:** parents, spouse/partner, children, grandchildren, siblings:

**Distance**

**Frequency of contact**

**Mode of contact:** face-to-face vs other (phone, letter, e-mail)

N.B. NOT full-blown network analysis (omit density, boundedness, homogeneity…) But questions on multiplexity (number of different types of support flowing through a set of ties) and direction of transfers
Social Integration

= 1. engagement in social relationships, 2. participation in activities

1. Relationships:

**Items from Berkman’s SNI**
(Berkman and Syme 1979 – number and relative importance of ties across 4 categories – basis for other longer scales such as EPESE and Cohen’s SNI (1991, 1997)):

‘How many children do you feel very close to?’

‘In general, apart from your children, how many relatives do you have that you feel close to?’

‘In general, how many close friends do you have?’

(Specify for latter two: ‘People you feel at ease with, can talk to about private matters and can call on for help’)

**Items from Cohen’s SNI** (not covered elsewhere):

Frequency of talking to ‘other relatives’, colleagues, fellow club/group members (religious and non-religious).
2. Activities:

Social Participation Scale (SPS, House et al. 1982 – Tecumseh community study)

Four activity categories:

- Formal organisational involvement (outside work)
  Link to SNI ‘About how often do you attend religious meetings or services’ and ‘Do you participate in any groups’
- Intimate social relations (visiting people)
- Active and relatively social leisure (cinema, pub etc.)
- Passive and relatively solitary leisure (TV, reading etc.)

(Ideally also measure satisfaction with activities undertaken)
Social support

Often classified into: **emotional**, **instrumental**, appraisal (decision-making, feedback), informational.

**Perceived** and **Received**

**EPESE** (Seeman and Berkman 1988):

- Close person you can confide in (yes/no) – choose one from list.
- Can count on help with daily tasks? (yes/no) up to 2 from list, adequacy.
- Can count on emotional support? (yes/no) – source, adequacy
- Perceived adequacy of personal contact with children.

(PLUS non-financial transfers in the intra-family (parents-children) section)
Relationship quality

Social conflict, ‘negative’ relationships

- ELSA/ HRS (self-completion): demands, criticism etc.
Social cohesion

Sparse evidence of link to health – possibly due to recent application of the concept

- HRS/ELSA (belonging, trust)
- Sampson’s Social Cohesion Scale
Scope for research ‘within discipline’
(social sciences)

- Link between age / sex/ SES and social networks / engagement?
- Formal vs. informal care usage by SES?
- Presence/number/sex of children associated with use of formal services?
- Support provided to network members linked to support received (‘exchange relationship’)?
- Extent of ‘sandwich generation’ phenomenon?
Links between ‘social’ and ‘health’

‘The evidence that social support is beneficial to health and that social isolation leads to ill health is now considerable…Yet the exact nature of the positive influence of social support on health remains elusive…’ (Stansfeld 2006: 148)

‘The research task is to give an account of what links social structure to health outcomes – to ask, what are the intermediary steps?’ (Marmot 2001: 353)
Links between “social” and “health”  
Drawing on and adapting Figure 7.1 in Berkman and Glass, in Berkman and Kawachi (2001).

**Social (Structural) Conditions**

- **NETWORK STRUCTURE**
- **CHARACTERISTICS OF NETWORK TIES:**
  - e.g. frequency of visual vs. non-visual contact; multiplexity (number of different types of support); reciprocity
- **CULTURE** (norms, values)
- **MACRO-SOCIAL CHANGE** (urbanisation, war etc.)

**Social mechanisms**

- CARE/ SUPPORT received and perceived; provided and received
- **SOCIAL ENGAGEMENT**
  - (Not explicitly intended to exchange help/support incl. physical or cognitive effort involved (‘reductionist’)
  - LONELINESS
  - RELATIONSHIP QUALITY
- **ACCESS TO RESOURCES AND GOODS**
  - Access to health care and social care

**Outcomes**

- DEATH
- SURVIVAL (after adverse event)
- CARDIOVASCULAR / ARTERIAL DISEASE
- HYPERTENSION
- PSYCHIATRIC DISEASE (e.g. depression)
- COGNITIVE DECLINE
- GOOD HEALTH, LONGEVITY

**Pathways**

**PSYCHOLOGICAL:**
- Emotions, cognitions -- Perceived stress, feelings of controllability, loneliness, depression

**(HEALTH) BEHAVIOURAL:**
- Social control, peer pressure, affirmation, information, referral – smoking, alcohol, diet, exercise, sleep, adherence to medical treatments

**PHYSIOLOGICAL:**
- NEUROENDOCRINE: HPA axis, SNS, BP -, allostatic load (‘stress’ - cortisol);
- CARDIOVASCULAR: reactivity, cardiopulmonary fitness;
- IMMUNE system function, (inflammatory markers)
- transmission of infectious disease
Key inter-disciplinary research questions

- Is there an **association**, in the older population of Ireland, between ‘social engagement’, and mortality / morbidity? Does the ‘causal arrow’ run from ‘social’ to ‘health’, or the other way, or does the direction change with age/life course?

- **Why** is social engagement associated with less disease / disability? What are the pathways involved?
Understanding the pathways: Biomarkers, phys. assessments (provisional)

<table>
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<tr>
<th>Blood pressure</th>
<th>Fibrinogen</th>
<th>B12</th>
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<tbody>
<tr>
<td>Folate</td>
<td>Ferritin</td>
<td>Creatinine</td>
</tr>
<tr>
<td>Fasting lipids</td>
<td>Lipo A</td>
<td>Fasting glucose</td>
</tr>
<tr>
<td>Glycosylated hemoglobin (HbA1c)</td>
<td>IL-6</td>
<td>TNF ApoE</td>
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...Cortisol, epinephrine, norepinephrine

(HPA axis) important for analysing Allostatic Load (‘wear and tear’): adaptive physiological responses that are chronically outside normal operating ranges – Possible pathway between life experiences (incl. soc eng) and health – need to collect over full diurnal cycle may pose practical barrier.

Telomeres?
Understanding the pathways Cont. Other key (psychological, behavioural) measurements

- Feelings of loneliness (R-UCLA short)
- Perceived stress (4-item PSS)
- Stressful life events (HRS) (death of child, natural disaster, abuse etc.)
- Control
- Cognitive functioning
- Health behaviours (smoking, drinking etc.)

But not coping, self-esteem, sense of coherence…
If social interaction indeed has a beneficial impact on physical, mental and cognitive health, what can be done to promote it?

Is social engagement modifiable? i.e. can we bring about changes in social engagement in order to promote ‘successful ageing’?

Can ‘policy’ successfully supplement informal sources of help in a way that results in greater perceived adequacy of help?

Do policy interventions ‘crowd out’ family care, or bring about qualitative changes in nature of help?

What kind of care, and to what extent, should be publicly funded?
(1) **Community/service provider centred**: e.g. increase the responsiveness and upgrade the helping skills of community care professionals (GPs, nurses, clergy, home helps etc.)

(2) **Support groups** for people affected by adverse life events (bereavement, divorce or separation etc.)

(3) **One-to-one mentoring** and coaching: key supported drawn from beneficiary’s existing social network or grafted onto it

(4) Effecting **changes in social network’s overall structure or in patterns of interaction** between key network members

(Adapted from Cohen, Underwood and Gottlieb 2000)