Families and the Aging Process
Officers Club – East Conference Room
Michael S. Hollingshaus (Mike)
PhD Candidate
Sociology
Graduate Research Assistant
Utah Population Database

Life Course Mental Health and Suicide
Familial Suicide Susceptibility Interacts with Early Parental Death to Affect Behavioral Health in Later Life

F x E Interaction

UPDB linked with Medicare Data (1992-2009)

Suicide FSIR
Findings

Distribution of Suicide Susceptibility

Marginal Effect of Parental Death on the Logit of Major Depression and Substance Abuse at Different Levels of Suicide Susceptibility – Random Effects Panel Regression

N=155,983 persons, 1,431,060 person-years
Background

• Discussions of what residents may prefer at end of life (EOL) rarely happen and are disconnected.

• Video communication tool that conveys residents’ current day-to-day and EOL care preferences.

• Approach to eliciting and sharing residents’ preferences for daily and EOL care.
Pilot Results

Prototyping of Me & My Wishes videos

- Developed training protocol for video production procedures.
- Residents communicated preferences via video and shared video with family.
- Family interviews illustrated understanding of resident wishes and disconnects between resident and family.
- Submitted R21 to conduct a pilot in one setting.
New Project - RQ:
Does a video and coaching intervention improve communication about resident care preferences among residents and family?

- Coaching to further conversation
- Examine areas of shared understanding disconnects, and gaps
- Focus on areas of evaluation of continued conversation and stability of information in video (e.g. shared understanding, knowledge of resident preferences), care aligns w/resident preferences.
“Back Pain is a 20th Century Health Care Disaster”

- Prevalence in U.S. estimated at 27% (increasing)
- 2nd most common reason for physician visits
  - Estimated 44.4 million physician visits for back pain in 2006 (*US Bone Jt Decade*)
- Estimated $193 billion total direct medical costs in 2004
  - Increase of 49% since 1996
- Indirect costs due to lost productivity even higher.
Need for a Paradigm Shift

Signs/symptoms analyzed

Pathology is determined

Treatment corrects pathology

Signs/symptoms disappear
The biopsychosocial model of health

**Biological**
- physical health
- disability
- genetic vulnerabilities
- drug effects
- temperament
- IQ

**Psychological**
- self-esteem
- coping skills
- social skills

**Social**
- peers
- family circumstances
- school

**Mental Health**
- family relationships
- trauma

The three circles represent the biological, psychological, and social aspects of health.
Using GIS, Smartphone, and Mobile Sensors to Understand Family Health Issues

Neng Wan, Ph.D.
Assistant Professor

Department of Geography
University of Utah
Introduction

- Smartphone is becoming more and more popular nowadays.
- The GPS, accelerometer, and inertial sensors in a smartphone make it possible to track an individual’s continuous location, physical activity, environmental exposure, and travel behaviors.
- Smartphone-based health data collection poses little inconvenience to smartphone owners.
- When paired with other sensors such as wrist bands, we can measure more health indicators such as heart rate, perspiration, and sleeping quality.
How to Apply Mobile Technologies in Family and Health Topics

- **Family and social network**
  - To understand how interactions among family members and friend networks influence health

- **Mental issues such as stress and depression**
  - To understand how individuals’ physical activities in space and other health indicators (e.g., heart rate) are influenced by mental problems
  - How smartphone and mobile sensors could be used to facilitate the treatment of these issues?

- **Health intervention**
  - Smartphones and phone apps could be used to promote physical activity and prevent obesity among family members
Hardware/Software Framework of My Current Project

Phone App Interface

Hardware Framework
Talker factors affecting speech understanding in older adults with hearing loss: Clear speech

Sarah Hargus Ferguson, Ph.D., CCC-A
1. When a talker’s clear speech helped normal-hearing young adults, it also helped older adults with hearing loss.
2. (a) Clear speech sounds angry
2. (b) But it doesn’t have to
Tara L. Queen

- Assistant Research Professor
- Department of Psychology
  - Background: Adult development & aging
    - Cognitive & socio-emotional aging
Research interests

- My work examines:
  - The impacts of health on well-being in adulthood and older age
  - Changes in cognitive ability & emotional experience in older adulthood
  - The social context of managing chronic conditions
Recent findings

- How does a child’s chronic illness impact parental well-being?
  - Outcome: Parental negative affect (NA)
  - Predictors: Child negative affect, child problems managing type 1 diabetes
  - We find that children alter fathers’ & mothers’ NA differently
    - Fathers are responsive to child’s problems managing diabetes
    - Mothers’ experience of NA increases when child’s NA increases
Clinical health and rehabilitation psychology background

Three basic areas: (1) adjustment to chronic health conditions and disability; (2) positive psychology; and (3) aging

Protective factors involved in the prevention of and adjustment to chronic medical conditions and disability

- Resilience
- Important role of family
- Develop and test interventions aimed at increasing resilience for the individual and family
RESEARCH FINDINGS

Study 1. Resilience, self-efficacy, and pain in persons aging with long-term physical disability

Structural equation model (simplified) depicting latent variables (resilience, self-efficacy, pain interference, and depressive symptoms) and age.

*p < .005
**p < .001

Study 2. The role of resilience in adjusting to life stressors in individuals aging with disability

Scores on the CD-RISC were not significantly different at time 1 and time 2, p = .22. Variables included in the final regression model accounted for 35% of variance in depressive symptoms, F(3, 510) = 85.73, p < .001. Lower resilience (β = -.35) and more negative impact of life stressors (β = .51) were significantly associated with depressive symptoms, ps < .001. Interaction effect was significant for resilience and negative impact, p = .03.

Table 1. Sample of stressful life events over the past 2 years

<table>
<thead>
<tr>
<th>Event</th>
<th>Number</th>
<th>% negative</th>
<th>% positive</th>
<th>% neutral</th>
<th>Impact Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death of spouse or partner</td>
<td>37</td>
<td>51.8</td>
<td>18.5</td>
<td>29.6</td>
<td>-5.5</td>
</tr>
<tr>
<td>Divorce or separation</td>
<td>39</td>
<td>41.8</td>
<td>26.6</td>
<td>31.3</td>
<td>-3.8</td>
</tr>
<tr>
<td>Death of close family member or friend</td>
<td>248</td>
<td>75.4</td>
<td>15.4</td>
<td>9.2</td>
<td>-8.8</td>
</tr>
<tr>
<td>Permanent injury or illness</td>
<td>273</td>
<td>75.5</td>
<td>15.7</td>
<td>8.7</td>
<td>-9.7</td>
</tr>
<tr>
<td>Retirement</td>
<td>81</td>
<td>15.6</td>
<td>54.3</td>
<td>30.1</td>
<td>48</td>
</tr>
<tr>
<td>Menstrual symptoms (e.g., pain and fatigue)</td>
<td>631</td>
<td>70.6</td>
<td>12.6</td>
<td>17.8</td>
<td>-9.6</td>
</tr>
<tr>
<td>Sexual difficulties</td>
<td>229</td>
<td>65.5</td>
<td>8.7</td>
<td>25.8</td>
<td>-8.3</td>
</tr>
<tr>
<td>Change in functioning such as being able to walk or bathe and cook independently</td>
<td>937</td>
<td>75.4</td>
<td>18.6</td>
<td>6.0</td>
<td>-9.6</td>
</tr>
<tr>
<td>Change in daily function</td>
<td>134</td>
<td>54.5</td>
<td>32.7</td>
<td>12.8</td>
<td>-6.4</td>
</tr>
<tr>
<td>Change in recreational activities</td>
<td>285</td>
<td>58.8</td>
<td>32.6</td>
<td>19.6</td>
<td>-6.5</td>
</tr>
</tbody>
</table>
Consortium for Families and Health Research
Family Caregiving in Hospice and Palliative Care: Across the Care Trajectory

Lee Ellington and many others
• Clinical Psychologist
• Associate Professor College of Nursing
• Huntsman Cancer Institute Investigator

Interpersonal health communication patterns over time predicting caregiver wellbeing, self care, and adjustment to bereavement

Problem:
• Caregivers are unprepared, overwhelmed and report multiple unmet needs
• Often reluctant or too overwhelmed to report concerns
• Providers are often unaware of needs and focused on providing direct care
Methods: Longitudinal observational study of caregiver-nurse communication in the home; CG outcome measures into bereavement

Preliminary findings indicate
- Physical care dominates with little variation in domain of care focus over time
- Little variation in interpersonal processes
- Multiple family caregivers; Relationship to CG varies
- Little focus on caregiver self-care
- Expression of caregiver concerns is lower than expected

Rich longitudinal observational data set representing families at end of life in their homes
Family-Centered Care is a Clinical Ideal

Domains of Care
CG: Physical, psychosocial, spiritual is embodied in the CG-RN relationship
RN: Provide physical care first; distinct from psychosocial and spiritual care

Care Interactions
Doing to
CG: Control
RN: Clinical Ideal
Doing for
Accepting help
Doing With
Empowering

Methods: Qualitative
Interview with nurse thought leaders
Focus groups with hospice nurses and former family caregivers