

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



Me & My Wishes [©]: Long Term Care Resident Videos to Communicate Care Preferences

Gail L. Towsley, PhD, NHA; Lee Ellington, PhD; Susan Beck, PhD, APRN; Bob Wong, PhD

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







The University of Utah Department of Physical Therapy





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

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Phone App Interface

Hardware Framework



TOGETHER WE REACH



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

Sarah Hargus Ferguson, Ph.D., CCC-A



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1. When a talker's clear speech helped normal-hearing young adults, it also helped older adults with hearing loss

Figure 6. Clear-minus-conversational (CL – CON) percent correct vowel intelligibility difference scores for 41 talkers for OHI listeners in the present study versus YNH listeners in Ferguson (2004). Scores along the diagonal are identical for the two groups.



C-FAHR mixer



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2. (a) Clear speech sounds angry



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2. (b) But it doesn't have to







- Assistant Research Professor
- Department of Psychology
 - Background: Adult development & aging
 - O 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
 - O Fathers are responsive to child's problems managing diabetes
 - O Mothers' experience of NA increases when child's NA increases



ALEXANDRA (ALEX) TERRILL DIVISION OF OCCUPATIONAL THERAPY

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, selfefficacy, pain interference, and depressive symptoms) and age. $*_{\rho} < .005$ $**_{\rho} < .001$

| Number | % negative Impact | % positive Impact | % neutral impact | Impact Mean |
|--------|--|---|---|--|
| 27 | 51.8 | 18.5 | 29.6 | 56 |
| 39 | 41.0 | 25.6 | 33.3 | 36 |
| 248 | 75.4 | 14.5 | 10.0 | 89 |
| 273 | 75.5 | 15.7 | 8.7 | 87 |
| 81 | 29.6 | 54.3 | 16.0 | .48 |
| 421 | 79.6 | 12.6 | 7.8 | 98 |
| 229 | 65.5 | 8.7 | 25.8 | 80 |
| 317 | 75.4 | 13.6 | 11.0 | 91 |
| 134 | 54.5 | 12.7 | 32.8 | 64 |
| 285 | 68.8 | 19.6 | 11.6 | 65 |
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Residence

Long testimon



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.



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



NCI-P01CA138317:PI Mooney; Project Leader – Ellington; Collaborating Scientist- Clayton & Reblin

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



ACS Pilot Project in Palliative Care (11-165-01: PI Ellington)

Methods: Qualitative

Interview with nurse thought leaders

Focus groups with hospice nurses and former family caregivers

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





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