The Home Usability Network

Community Living Summit
Sept. 19-21, 2016
Alexandria, Virginia
Researchers
Craig Ravesloot, Lillie Greiman, Andrew Myers, RTC:Rural, University of Montana
Bryce Ward, Bureau of Business and Economic Research, University of Montana

Discussants
Margo Waters, disABILITY LINK, Atlanta, GA
Phil Rumrill, Center for Disability Studies, Kent State University
Acknowledgements: project development

RTC: Rural
• Bob Liston
• Mary Olson

CIL partners
• Amber O’Haver- accessABILITY Indiana, Indianapolis
• Brian Peters- Independence First, Milwaukee
• Todd Vaarwerk- Western New York Independent Living, Buffalo
• Janet Wilkinson- REACH, Dallas
• Heather Dorner- disABILITY LINK, Atlanta
Introduction

• Home is the springboard for community participation

• Many people with disabilities live in homes that do not suit their needs.

• Living in a home that does not meet one’s needs may negatively impact community participation.
Home Usability

• Finding a usable home is a major problem for many PWD.
• Accessibility is about codes and standards.
• Usable homes are homes that suit an individual’s needs.
• Three pathways to living in unusable homes:
  1. Becoming impaired and unable to relocate
  2. Compromise when usable is unavailable/unaffordable
  3. Living in “accessible” that is not usable
American Housing Survey (HUD)

- Nearly 60% of US households with an individual that uses a wheeled mobility device are in homes that have steps at the entrance.

- Of those living in multi-story homes, nearly 20% do not have an entry level bathroom and over 30% must climb stairs to reach a bedroom.

- Of those living above the ground floor in an apartment, over 70% do not have a working elevator.

American Time Use Survey (BLS)

• Compared to 88% of people without mobility impairment (MI) only 55% percent of people with MI left home on their diary day.

• They spent less time in education, social and recreational, caregiving and community activities.

• They spent less time working and more time resting.

• They spent 10% more time in self-care despite the fact that they were less likely to do any grooming (65% vs 80%).

• They were much more likely to engage in social and recreational activity without grooming (29% vs 17%).
Health and Home Survey (n=170)

• Overall, people with MI report lower satisfaction, safety and ease across areas of the home

• Compared to people without MI, people with MI rated their exertion bathing 3 times higher than those without MI (34%_{max} vs 11%).

• A one standard unit increase in bathing exertion was associated with a 61% decrease in the number of social and recreational activities.
Why does Home Usability matter?

• Living in unusable homes may require more effort for ADLs like bathing.
• Energy spent on overcoming these problems in the home may reduce time and energy for other activities.
• Making homes more usable may translate into more community participation.
Simple Economic Story

• People have a certain capacity for effort (i.e., effort is scarce).
• Every activity has an effort price. Effort price is determined by personal characteristics and environmental characteristics (home usability).
• People with mobility impairments may have less capacity for effort, may face higher effort prices for activities, or both.
• As such, they spend more time resting and less time engaged in activities – particularly activities with higher effort prices.
• To increase activity/participation among people with impairments, we need to increase capacity or lower prices of activities. This may be done through increasing personal capacity or by modifying the environment.
• We modified the environment by helping people make their homes more usable.
Home Usability Intervention

• Worked with a team of 5 CIL advocates from across the country
• Collaborated on survey design, intervention procedures, website development, participant recruitment
  ▪ Home Usability Plan
  ▪ Home Usability Network
• 3 CILs implemented the intervention
  ▪ accessABILITY in Indianapolis, IN
  ▪ disABILITY LINK in Tucker, GA
  ▪ Resources for Independence Central Valley in Fresno, CA
Intervention Acknowledgements

disABILITY LINK (GA)

• Margo Waters, Heather Dorner, Katelyn Johnson

accessABILITY (IN)

• Morgan Daly, Angie Hass

Resources for Independence Central Valley (CA)

• Joseph Cody, Barney Morris, Lillian Yang
Intervention Procedures

- Intervention participants recruited from Health and Home Survey sample and local CILs
- Worked with local CIL staff to identify home usability problems
- Completed a Home Usability Plan (HUP) and worked with a Home Usability Network (HUN) to address the problem
  - HUP: based on an ILP, used to identify home usability issues and personal resources
  - HUN: network of organizations and personal resources that can work to solve home usability issues
Pilot Results

• 19 consumers completed or currently active in program
  ▪ 29 recruited

• Bathroom issues most common
  ▪ 11 of 19 (58%) of identified issues
    ➢ Grab bars
    ➢ Toilet supports
    ➢ Shower chairs/supports
    ➢ Magnifying mirror

• Other issues addressed
  ▪ Ramps and sidewalks
  ▪ Improved lighting
  ▪ Cleaning

• Evaluation to be completed this Fall
Discussion/Implications

• Many people with mobility impairments live in homes that are not accessible or usable
• Bathrooms are particularly problematic
  ▪ High levels of exertion
  ▪ Safety concerns
• People with impairments spend time differently
  ▪ Less social and recreational activities
  ▪ Less grooming
  ▪ More television
• Implications for their participation in the community
• The bathroom could be a critical area for intervention
Potential Impacts on Policy and Practice

- Focus on housing as it impacts participation
- Bathroom usability interventions to improve bathroom safety (reduce risk of hospitalization/institutionalization), exertion and satisfaction.
- Tools for service providers to connect with housing resources and develop housing program capacity.
Contact Information:
Lillie Greiman
RTC: Rural
The University of Montana
Lillie.Greiman@umontana.edu
406.243.6102
http://rtc.ruralinstitute.umt.edu/

Additional Research Results:
http://pip.ri.umt.edu/
http://pip.ri.umt.edu/housing-usability-research/