



# Assessing the Risk of IADL Tasks from the Perspective of Medically-at-risk Older Adults and their Caregivers.

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## PURPOSE

The purpose of this study was to further the understanding of the impact of chronic disease on functional ability in older adults by determining which instrumental activities of daily living (IADL) tasks are most meaningful and which may pose a safety hazard for medically at risk older adults who plan to live independently.

## Research Questions

1. Which IADL tasks are the most meaningful to older adults?
2. Which IADL tasks are most affected by chronic disease?
3. How do the perceptions of meaningfulness and performance capability differ between older adults and their caregivers?

## DISCRIPTION

As the older adult population rises, there will be increased need of the health care system to provide preventative care for at risk older adults. This will include assessments of IADLs to determine if an older adult is safe to live independently or needs services such as occupational therapy to decrease the risk of injury. Specific IADLs examined in this study include:

- Shopping for groceries
  - Planning a meal
  - Cooking
  - Driving
  - Planning trips
  - Community participation
  - Home management
  - Yard work
  - Financial management
  - Medication management
  - Phone use
- (American Occupational Therapy Association, 2008)



## DESIGN

In order to answer the research questions, this study was designed to be a mixed design for the purpose of examining how medical conditions in older adults affect functional performance. An interview format was used that included objective scales in order to measure the participant's and their caregiver's perceptions of the meaningfulness and performance of selected instrumental IADLs. Open ended questions were used to expand on the participant's and their caregiver's perspective on how their health condition is affecting their ability to carry out tasks of daily living. See figure 1 and 2.

## BIBLIOGRAPHY

American Occupational Therapy Association. (2008). Occupational therapy practice framework: Domain and process (2nd ed.). *American Journal of Occupational Therapy*, 62, 625-683.

## PARTICIPANTS

A total of 24 participants were gathered from the outpatient and day rehab programs at Pitt Memorial hospital (PCMH). The participants made up two groups of twelve.

The first group included adults 60 years or older who had recently been hospitalized in the last six months due to a chronic illness. Chronic illness included heart disease, stroke, COPD, diabetes, and/or dementia. The expectation for these participants was to return to his or her own home and participate in complex IADLs.

The second group were individuals identified as the main caregiver to the participant in group 1. The caregivers could be a spouse, family member, friend, or neighbor that lives with the participant or close by.

All participants must live within a 50 mile radius from the research center and speak English.

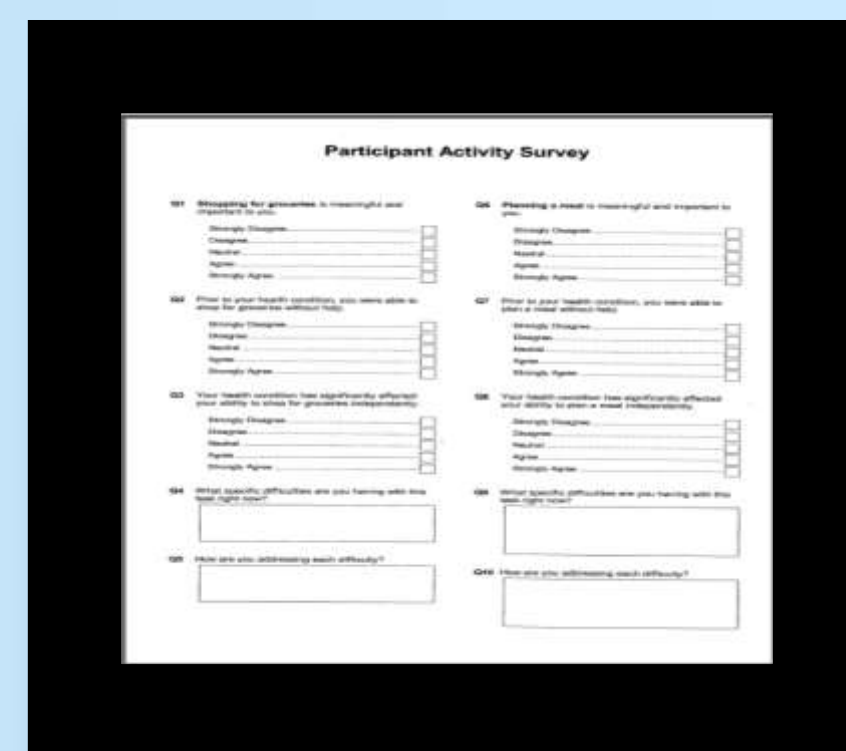


FIGURE 1

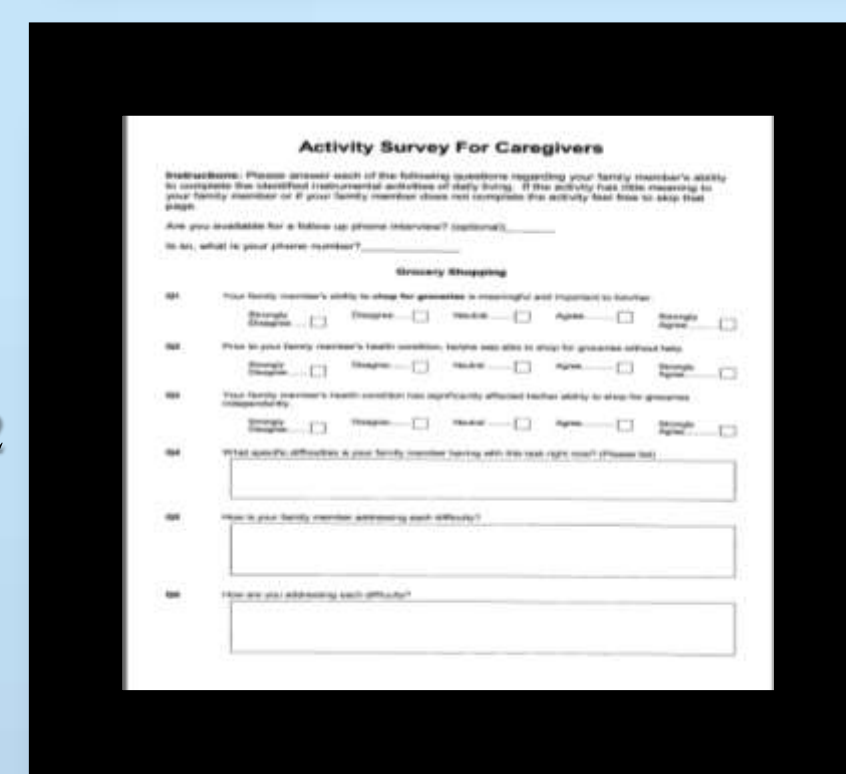


FIGURE 2

## PROCEUDURE

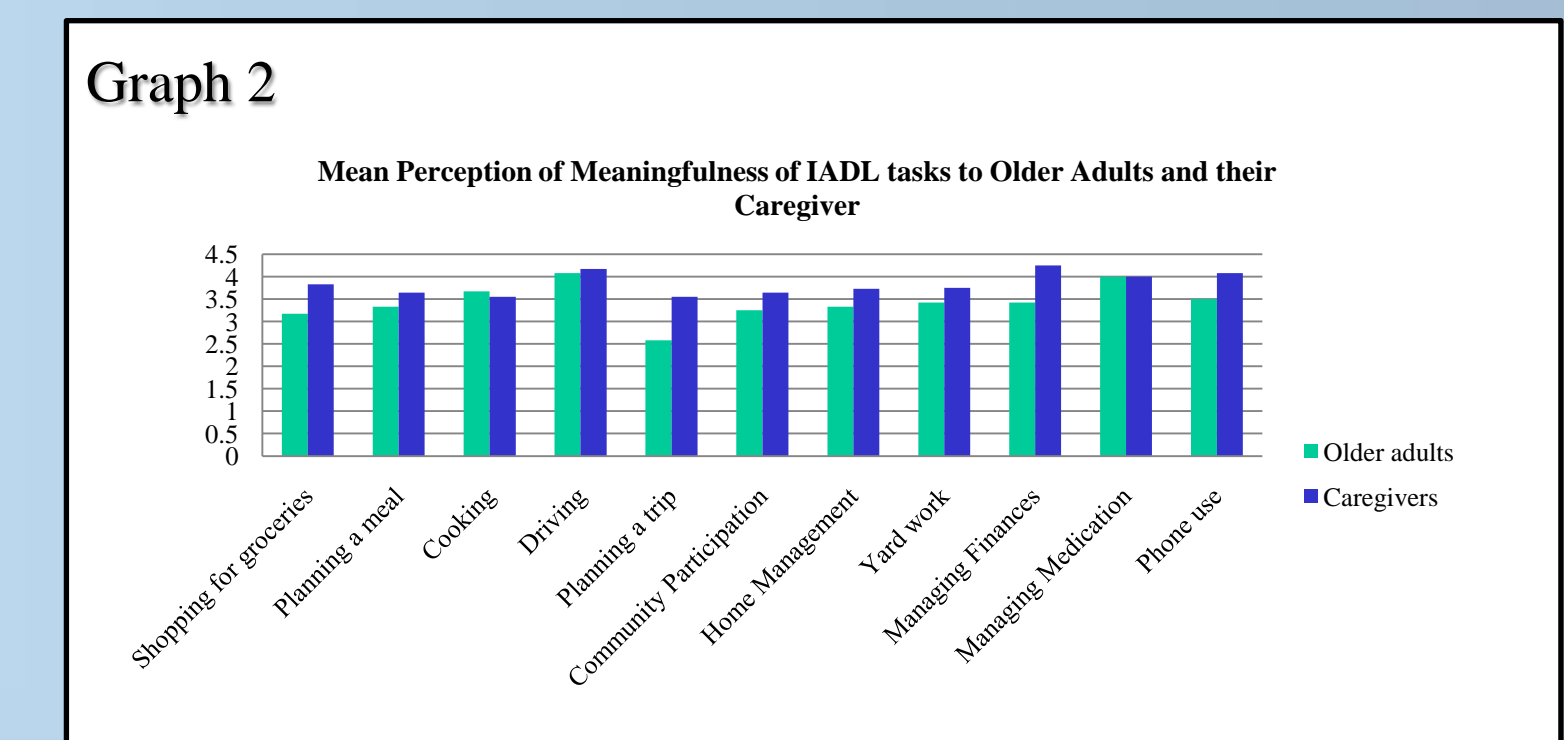
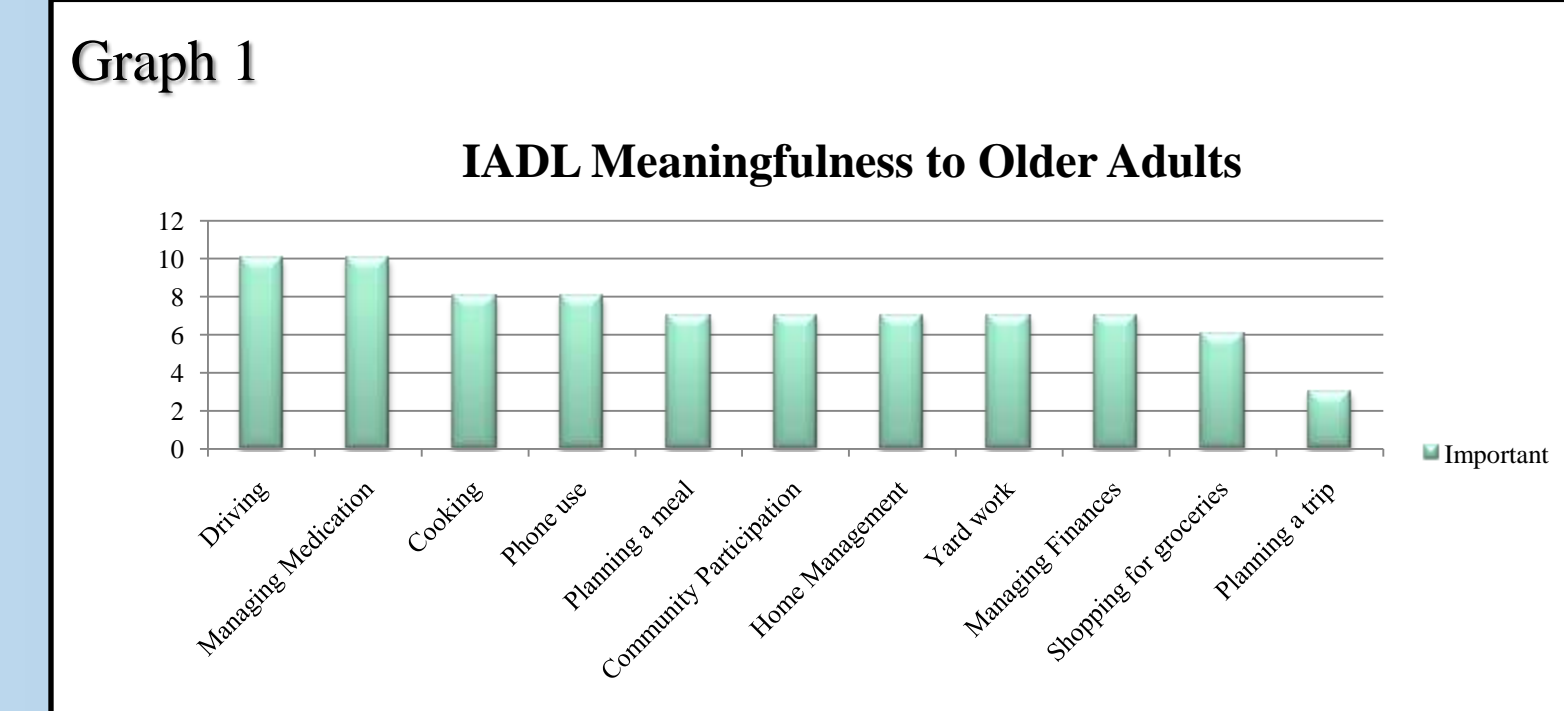
1. Submitted to the Institutional Review Board (IRB) for approval in October 2008.
2. In October 2008, the researcher met with occupational therapists in the outpatient rehabilitation and day rehab program at PCMH in Greenville, NC to explain the study and participant criteria in order to obtain their cooperation to use patients from their rehab programs.
3. Therapists were instructed to notify researcher via email when they had patients who met the inclusion criteria for participation in the study.
4. The researcher scheduled times to collect data either before or after the participant's therapy sessions.
5. Both participants were asked to sign a consent form.
6. Interviews were conducted in a closed room in the outpatient center and the day rehab center.
7. Both the participant and the caregiver were instructed to skip the questions on tasks that did not pertain to the participant or that were not meaningful to the participant.
8. All completed surveys and consent forms were stored in a locked cabinet to protect the subject's privacy.
9. Data from the surveys was organized on the computer in excel and then transported to SPSS for quantitative analysis using both parametric and nonparametric statistics. Descriptive statistics were calculated for each scaled question.
10. Qualitative analysis was used to analyze answers to the open ended questions from both surveys. Open ended questions were summarized for each participant pair. Each IADL task was also summarized for meaningfulness, specific difficulties, and compensation.

## RESULTS

- Ten out of twelve older adult participants stated that driving was meaningful and important. See graph 1 and 2.
- Paired sample t-test to examine difference between the participants and their caregiver for meaningfulness showed a significant difference in *planning a trip* ( $t = -2.17, p < .04$ ) and *managing finances* ( $t = 2.42, p < .03$ ).
- Paired sample t-test to examine difference between the participant's perception of previous level of function and current level of function showed a significant difference for ten IADLs. Only *phone use* ( $t = 1.00, p < 0.35$ ) showed no significant difference.
- Paired sample t-test to examine difference between the caregiver's perception of the participant's previous level of function and current level of function showed significant difference for ten of the IADLs. *Managing finances* ( $t = 1.86, p < 0.10$ ) had no significant difference.
- Paired sample t-test was computed to examine difference between the participant and their caregiver for previous level of function showed a significant difference for *managing medication* ( $t = -3.23, p < .00$ ) and *phone use* ( $t = -4.58, p < .00$ ).

## Discussion

- Although a small sample, this pilot study offers evidence that driving is the most meaningful activity to older adults.
- The only IADL perceived by the participants to be not impacted by their medical condition was *phone use*. In contrast the caregivers perceived the only IADL to not be impacted by the participant's medical condition was *managing finances*.
- The results of this study clearly indicated that the caregivers perceived the older adults to have been at a higher level of function prior to their health condition and hospitalization in the activities of *managing medication* and *phone use*. Several caregivers and older adults reported having low self-esteem, depression, and embarrassment by their current limitation which may have impacted their feeling of self efficacy.
- Decreased driving independence appeared to impact performance of most other IADLs including community participation, managing finances, shopping for groceries, and planning a trip.
- Although there was not a significant difference between the caregiver's and the participant's perception of *current driving ability* it does seem that the caregivers perceive the participant's driving ability to be more impacted by their health condition than the participant which leads concerns for safety.



## CONCLUSION

The purpose of this study was to further the understanding of the impact of chronic disease on functional ability in older adults by determining which IADL tasks are most meaningful and which may pose a safety hazard for medically at risk older adults who plan to live independently. The most meaningful IADLs to medically at-risk participants were driving and managing medication. Participants reported all IADL tasks affected by chronic disease except managing finances and phone use. There was some discrepancy between the caregiver's and participant's perception of driving ability which leads to concerns for safety. Because of this concern for safety and because this study confirms the importance of driving to older adults, it is suggested to thoroughly evaluate driving performance. In the clinics, occupational therapists can assess driving skills including vision, cognition, and motor performance.