



# Workplace Accommodation Use for Individuals with Vision Impairment

Maureen Linden

Presented by Nathan W. Moon, PhD

# Background

- The Workforce is Aging
  - In 2012, 19% of all employees will be 55 or older<sup>1</sup>
- Age is Highest Predictor of Disability
  - About 30% of those 65-74 have a disability<sup>2</sup>

1. Tossi, M. (2004) "Labor Force Projects top 2012: the Graying of the U.S. Workforce," Monthly Labor Review Online
2. Erickson, W., Lee, C. (2008) 2007 Disability Stats Report: The United States. Ithaca, NY: Cornell University Rehabilitation Research and Training Center on Disability Demographics and Statistics.

# Purpose

Study Purpose:

To examine accommodation use and its characteristics.

Presentation Focus:

Accommodation use by those with **different vision impairments** across **age groups**.

# Methods

- Survey relating characteristics of the individual to the accommodation
  - Administered dominantly electronically
  - Marketed through consumer lists, national publication lists, social networking venues.
  - Inclusion Criteria:
    - Individual has 1 or more functional limitations
    - Individual is currently employed or volunteers

# Job Characteristics

- EEOC Categorization
- Relationship to Employer
- Location of Work
- Pay Rate and Hours/wk

# Functional Limitations

Broad functional limitation categories were selected from the ICF and further delineated by specific activities.

Example: Vision

“I am unable to see details such as newspaper print, but I can see obstacles in my path.”

# Accommodations

- Accommodations divided into 4 categories
  - Universal features
  - Adaptations
  - Help or Assistance
  - Assistive Technology

# Assistive Technology

Developed from the National Classification System on Assistive Technology

- 4 level hierarchy of assistive technology classification

Examples:

- Sensory Elements > Optical Aids > Specialized Writing Devices > Signature Guides and Stamps
- Computer > Hardware > Input Devices > Voice Input



# Satisfaction, Importance, Frequency

- Recorded for each accommodation individually.
- Instrument was nominal Likert scale for each construct.

# Population Demographics

374 individuals responded to the survey, of which 101 reported vision impairment.

73% Female; 52% under the age 55

Race:

- 3% African
- 6% Asian
- 5% Native American
- 85% Caucasian

Ethnicity: 94% non-Hispanic

# Population Demographics

## Educational Background

Some High School / Diploma	3%
Some College / Associates Degree:	20%
Bachelors Degree:	40%
Master's Degree	34%
Ph.D. / Professional Degree	3%

# Population Job Characteristics

## Job Type

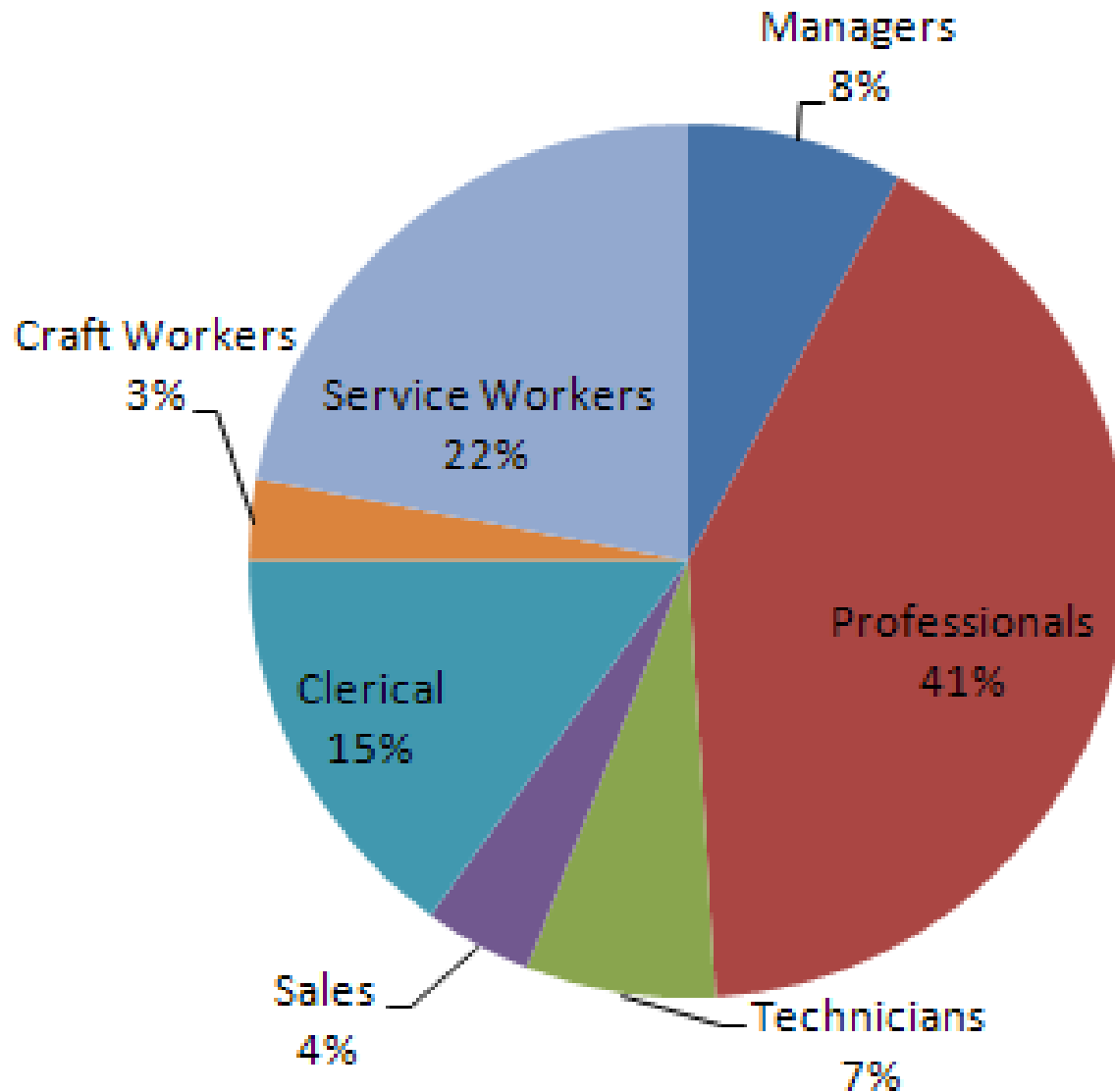
One full-time	61%
One part-time	24%
Multiple Jobs	15%

## Employment Type

Employee	64%
Self – Employed	21%
Volunteer	7%

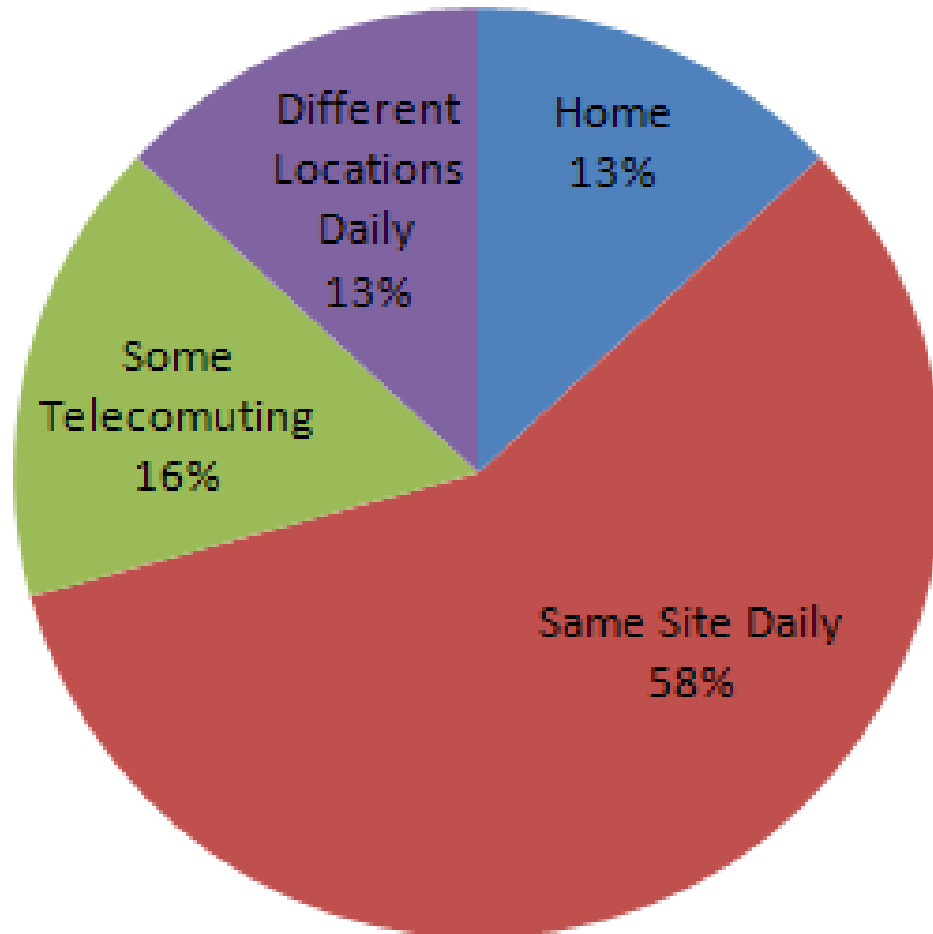
# Population – Job Characteristics

## Job Categories

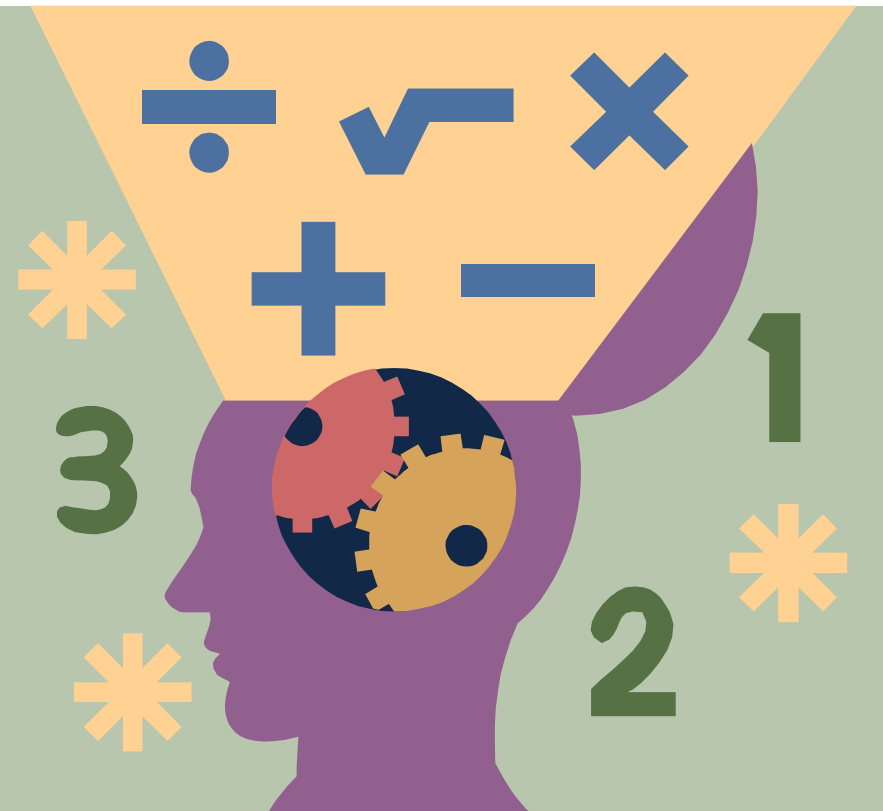


# Population – Job Characteristics

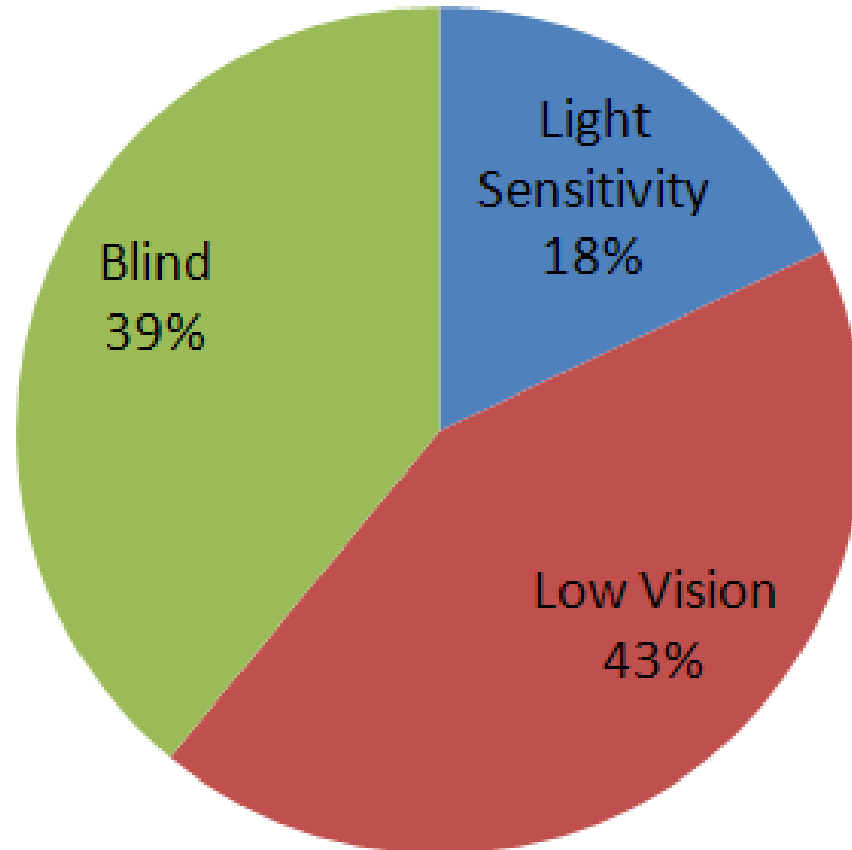
## Work Location



# A WORD ON STATISTICAL ANALYSIS



# Respondents' Limitation Group





# Additional Limitations

Older workers with vision impairment have MORE limitations than younger workers

Older workers average 0.74 additional limitations

Younger workers average 0.65 additional limitations.

	Under age 55	Over age 55
Mobility	25%	29%
Upper Extremity	10%	13%
Hearing	2%	6%
Speech	12%	8%
Mental Function	15%	17%

# Accommodation Use

Age is a predictor of number of accommodations used ( $p = 0.075$ )

- Younger workers used 7.8 accommodations
- Older workers used 6.4 accommodations

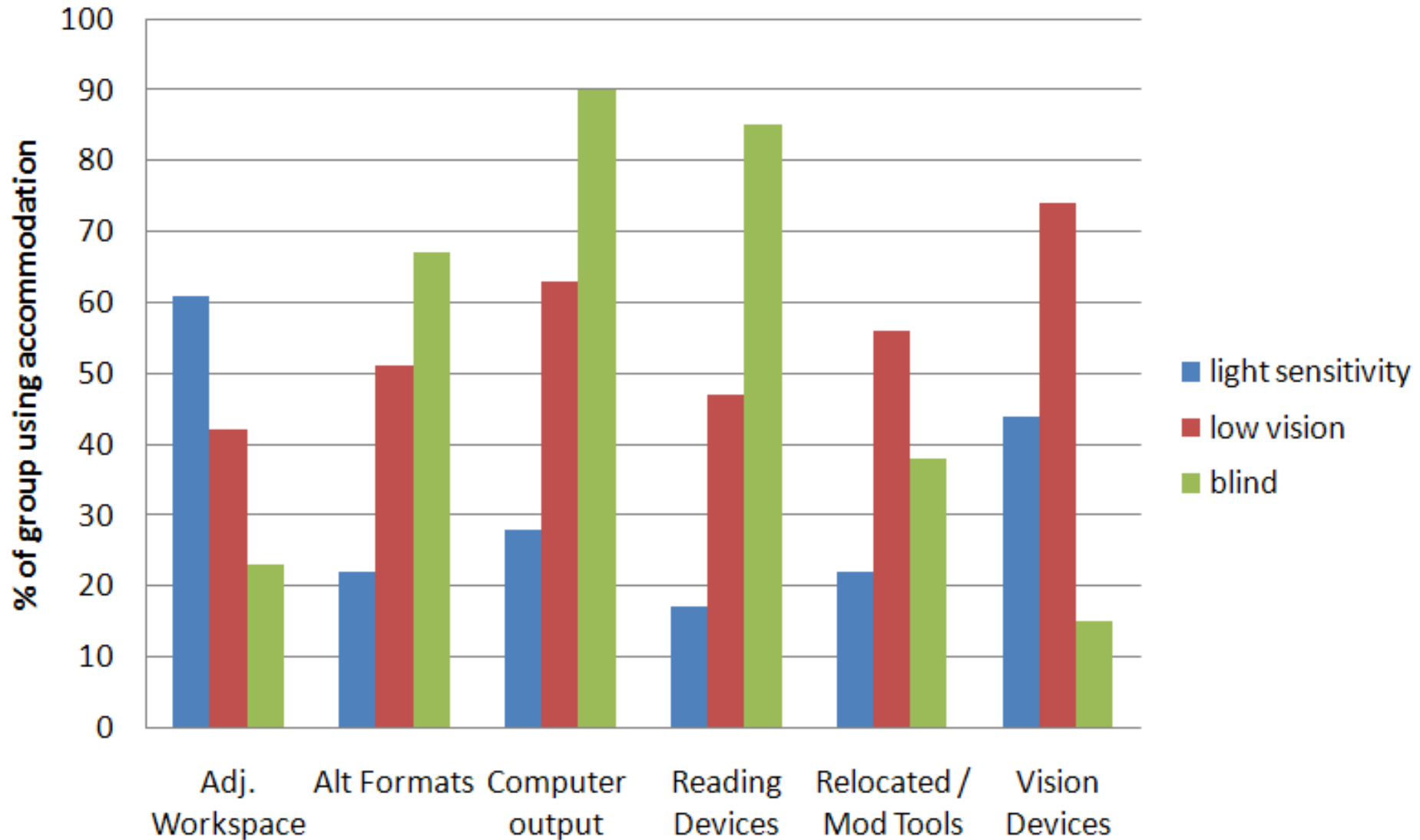
Type of Vision Limitation is strongly related to number of accommodations used ( $p=0.001$ )

- Light Sensitivity ~ 4.4 accommodations
- Low Vision ~ 7.2 accommodations
- Blindness ~ 8.6 accommodations

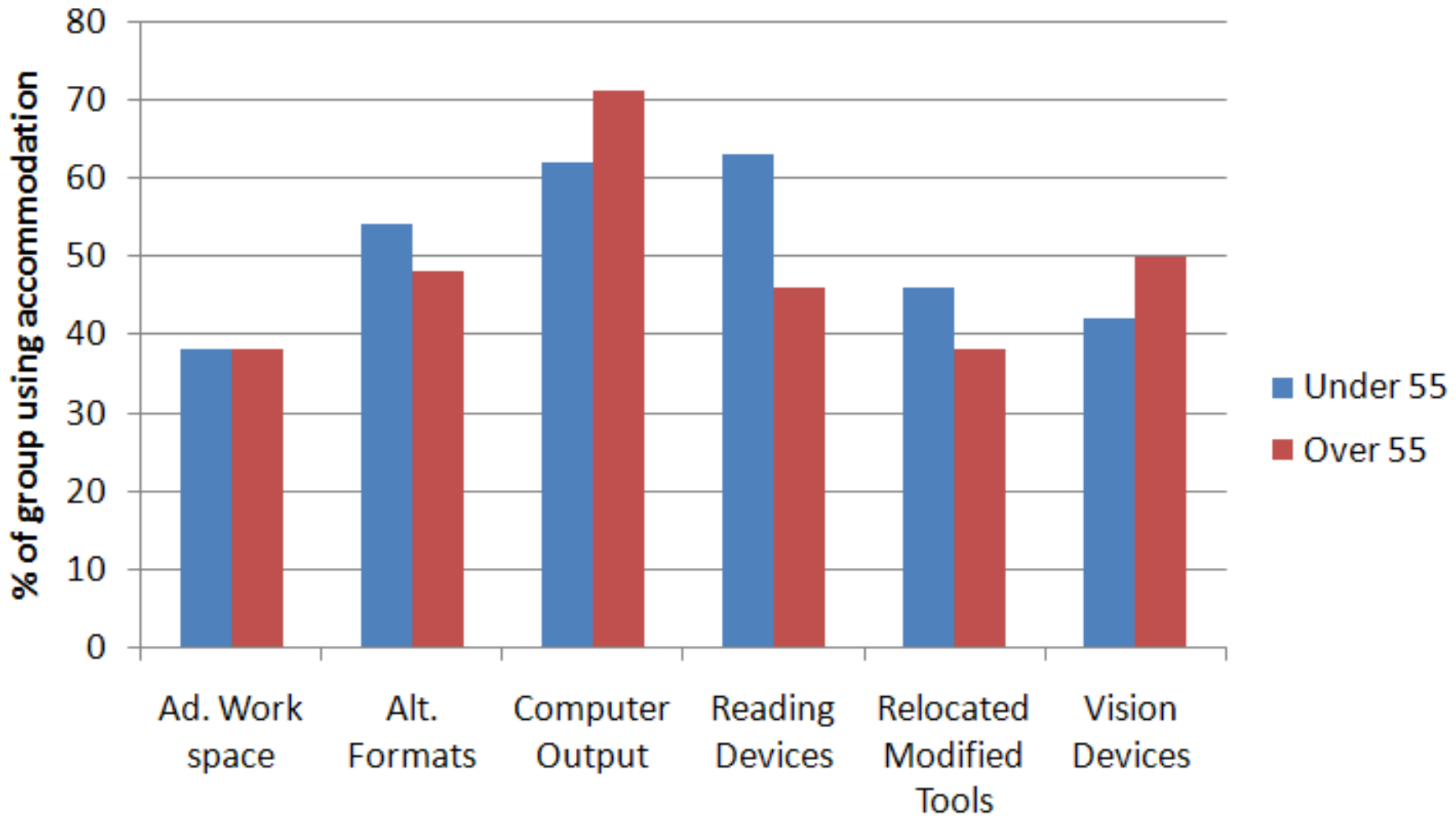
# Most Common Accommodations

- Adjustable Workspace
- Alternate Formats
- Computer Output Devices
- Reading Devices
- Relocated or Modified Tools
- Vision Devices

# Accommodation Use Described by Vision Group



# Accommodation Use Described by Age Group



# Satisfaction with Accommodations

Satisfaction value averages expressed Neutral satisfaction with the accommodations

Satisfaction with the accommodation did not vary with either factor (age group or vision limitation).

# Perceived Importance of Accommodations

Importance of these accommodations ranged from “important” to “very important”

- Age group strongly influenced
  - Adjustable Workspace ( $p = 0.035$ )
  - Computer Output Devices ( $p = 0.014$ )
- Type of Vision Limitation strongly influenced
  - Reading Devices ( $P=0.006$ )

# Frequency of Use of Accommodations

Accommodations used “frequently” or “always”

- Age group had a strong influence on frequency of use of
  - Adjustable Workspace ( $p = 0.008$ )
- Type of vision limitation had a influence on frequency of use of
  - Reading Devices ( $p = 0.01$ )



# Conclusions

- Older workers had more “secondary” limitations
- Older workers used fewer accommodations
- Commonly used accommodations were assistive technology based.
- Individuals are neutral in their satisfaction of the commonly used accommodations

# Study limitations

- Demographics are homogenous.
- Respondent pool is limited
- Preliminary analysis

**WORK** rerc  
Thank you

[Maureen.Linden@coa.gatech.edu](mailto:Maureen.Linden@coa.gatech.edu)

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