

ACTIVITIES AND DISABILITY

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DISABILITY MYOPIA

Disability surveys focus on difficulties with personal care (ADL) and household management (IADL) activities.

Other common and valued life activities are bypassed such as religious participation, sleep, hobbies, recreation, home repairs, yard/garden work, helping others, socializing with friends.

Expansion of activities queried would show disability's scope and sequence better.

EXPANSION

Theoretical reasons for expansion are strong -- but how to convince survey designers?

Empirical buttress can occur right now by comparing ADL/IADL disabilities with data on time spent in many activities.

DATA SOURCE

Health and Retirement Study (HRS), a nationally representative panel survey of midlife and older Americans.

HRS respondents are community-dwelling at first interview. They have a main interview every two years; N~20,000. We use 2000, 2002, 2004 for disability data.

HRS has supplements, including the Consumption and Activities Mail Survey (CAMS) conducted biennially (“off year”) for a subsample of HRS respondents; N~5,000. We use 2001, 2003, 2005 for activities data.

INDICATORS

CAMS has 33 items about personal care, household management, religious and voluntary activities, socializing, hobbies, recreation, entertainment, and sleep/rest. Hours spent last week or month. We pool items into 13 domains using a standard time-use classification.

Disability measured by: no. ADL disabilities (dress, bathe/shower, eat, walk across room, get in/out of bed), no. IADL disabilities (prepare hot meal, shop for groceries, make phone calls, take medications, manage own money), and disability hierarchy (no ADL/IADL, IADL only, any ADL). Disability = health-related difficulty, personal assistance, or special equipment.

ACTIVITY DOMAINS

	No. of CAMS items
Obligatory Activities	
Personal Care	2
Sleep & Naps	1
Walking	1
Transportation	0
Committed Activities	
Paid Work	1
Household	5
Repairs & Yard	3
Shopping	1
Help Others	1
Discretionary Activities	
Socializing	3
Entertainment	2
Public Service	3
Hobbies & Leisure	9
Sports & Exercise	1

ANALYSIS OF MIDLIFE GROUPS

Trends in activities

Trends in disability

Links between activities and disability

MIDLIFE RESPONDENTS

CAMS Respondents

	<u>2001</u>	<u>2003</u>	<u>2005</u>
50-54	218	84	564
55-59	489	394	790
60-64	811	612	780
50-64	1518	1090	2134

Cohort-Eligible Respondents

	<u>2001</u>	<u>2003</u>	<u>2005</u>
50-54	126	6	464
55-59	488	360	775
60-64	811	609	751
50-64	1425	975	1990

PARTICIPATION AND HOURS PER MONTH

	Participation in month (any hours; %)	Hours per month (all persons; mean)	Hours per month (rank)
Obligatory Activities			
Personal Care	99.7 - 99.9	33.2 - 37.2	6
Sleep & Naps	99.4 - 99.6	187.3 - 189.5	1
Walking	83.6 - 86.3	25.2 - 29.3	7
Committed Activities			
Paid Work	54.9 - 66.3	81.2 - 103.3	3
Household	98.2 - 98.5	66.0 - 67.0	4
Repairs & Yard	69.1 - 71.4	13.5 - 14.9	8
Shopping	90.9 - 92.2	14.9 - 16.4	9
Help Others	67.9 - 70.1	7.3 - 8.2	10
Discretionary Activities			
Socializing	98.7 - 99.0	57.9 - 59.4	5
Entertainment	27.3 - 29.1	1.3 - 1.5	13
Public Service	58.5 - 64.1	7.6 - 8.5	12
Hobbies & Leisure	99.9 - 100.0	185.6 - 197.2	2
Sports & Exercise	38.0 - 41.2	6.9 - 9.5	11

TRENDS IN ACTIVITIES

Statistically significant trends:

	<u>Participation (%)</u>			<u>Hours (mean)</u>		
	<u>2001</u>	<u>2003</u>	<u>2005</u>	<u>2001</u>	<u>2003</u>	<u>2005</u>
<u>Ages 50-54</u>						
Walking	79.1	--	89.1			
<u>Ages 55-59</u>						
Entertainment Leisure	26.7	27.7	32.1	1.2	1.5	1.6
Paid Work				185.8	191.1	198.2
				105.1	94.0	(111.8)
<u>Ages 60-64</u>						
Personal Care Leisure	99.5	99.8	99.9	31.8	38.4	41.8
Socializing	99.2	97.8	(98.6)	184.4	186.6	199.4
Public Service	66.7	60.3	60.3			
Sports				8.6	6.2	(11.0)
<u>Ages 50-64</u>						
Walking	83.6	(85.6)	86.3	25.2	25.3	29.4
Paid Work	61.0	54.9	66.3	91.2	81.2	103.3
Leisure				185.6	188.8	197.2
Sports				7.8	6.9	9.5
Public Service	64.1	59.2	58.5			

SUMMARY OF ACTIVITY TRENDS

For ages 50-54, little change.

For ages 55-59, increase in entertainment/leisure and less time in paid work.

Ages 60-64 show the most change: increased personal care and leisure, and decreased socializing, public service, and sports.

TRENDS IN DISABILITY

	<u>ADL Count (mean)</u>			<u>IADL Count (mean)</u>		
	<u>2001</u>	<u>2003</u>	<u>2005</u>	<u>2001</u>	<u>2003</u>	<u>2005</u>
Ages						
50-54	.24	--	.16	.10	--	.10
55-59	.25	.26	.26	.12	.12	.13
60-64	.20	.24	.23	.10	.12	.12
50-64	.23	.25	.22	.11	.12	.12

Summary: No observed or statistically significant trends/differences.

TRENDS IN DISABILITY

ADL/IADL Hierarchy (% distributions)

	<u>2001</u>	<u>2003</u>	<u>2005</u>
Ages 50-64			
Neither	85.8%	84.8%	86.1%
IADL Only	3.0	3.3	3.6
Any ADL	11.2	11.9	10.3
Ages 50-54			
Neither	86.8%	--	88.8%
IADL Only	1.6	--	3.9
Any ADL	11.6	--	7.3
Ages 55-59			
Neither	85.3%	85.8%	84.7%
IADL Only	3.0	3.1	3.4
Any ADL	11.7	11.1	11.9
Ages 60-64			
Neither	86.1%	83.6%	85.5%
IADL Only	3.4	3.5	3.7
Any ADL	10.5	12.9	10.8

Summary: No observed or statistically significant trends/differences.

HYPOTHESES

Hyp.1: As disabilities rise, obligatory activities increase in amount of time, whereas committed and discretionary activities decrease in participation and amount of time.

Hyp. 2: Links between disability and activities are strongest for the component activities of ADL/IADLs.

ADL/IADL RELATED DOMAINS

Personal Care

- Personal care

- Self-care for medical condition

Household

- Clean house

- Wash/iron/mend clothes

- Prepare meals and clean up

- Care for pets

- Manage finances/bills

Shopping

- Shop or run errands

Hyp. 2: Personal care time rises sharply with disability, and household and shopping time decrease sharply.

ANALYSIS OF LINKS

Cross-sectional

Ages 50-64

We report relationships of the disability indicators with hours spent in activities.

ACTIVITIES AND DISABILITY

Hours spent in six activity domains have strong linear relationships with ADL count and IADL count.

The same domains are involved with ADLs as with IADLs.

Results are similar but weaker for disability hierarchy.

Results are same for each year (2001, 2003, 2005).

As disability counts increase:

Personal Care hours increase.

Paid Work, Entertainment, Sports, Repairs&Yard, and Sleep&Naps hours decrease.

(Some evidence that Walking decreases and Socializing increases with disability. No relationship between disability and Household, Shopping, Help Others, Public Service, or Leisure activities.)

SUPPORT FOR HYPOTHESES

Hyp.1 is partly supported.

As disability rises, **personal care time increases**; but **sleep/naps time decreases**.

As disability rises, **some committed and discretionary activities decrease**; the others show no link with disability.

Hyp. 2 is partly supported.

Personal care time is strongly linked with disability.

But household and shopping time show no link with disability.

CONCLUSION

Activities may be more sensitive to change than disability. Midlife American cohorts changed some aspects of time use (personal care, work, leisure) even in the short period 2001-2005.

Levels and changes in activities are a potential barometer of disability, with the benefit of much broader scope than standard disability items.

Our next analyses will study how functional limitations affect levels and changes in activities. This adds health-relatedness to analysis of activities.

