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# Profile of Community-dwelling Adults Aging with Long-term Physical Disabilities

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**Key Finding:** Our cohort has fewer social, financial, and physical resources than those in similar studies. Our cohort reflects the common symptoms associated with aging with disability (AwD) population. Black/African American individuals AwD have the highest ability to participate in, and satisfaction with their participation in, social roles and activities among other races.

## Background

- People aging with long-term physical disabilities (PAWLTPD) experience accelerated aging and greater difficulty with independent living.
- Increased functional limitations and secondary health conditions (e.g., depression, fatigue, pain, sleep disturbance) significantly decrease satisfaction with social roles and social participation among PAWLTPD.
- There are few general US population-based surveys that include age of onset, disability, or symptoms of aging (pain, fatigue, and depression).
- Existing research investigating PAWLTPD has been:
  - Small-scaled; lacking longitudinal studies.
  - Diagnosis-focused; or focused on those with early onset-disability.
  - Composed of disproportionate White participants.

## Purpose

- To compare cohort sociodemographic, health, and disability traits by age groups to evaluate the sample integrity in comparison to samples in the existing literature.
- To describe the social participation prior to Covid-19 in order to provide a context for our future longitudinal analysis.

## Methods

- **Design & Setting:** A 3-year longitudinal cohort study conducted once a year over the phone or online. This study presented data only from Year 1, collected from August 2018 to July 2019.
- **Recruitment:** Area Agencies on Aging, Centers for Independent Living in Missouri, and social media.
- **Participants:** 474 Community-dwelling PAWLTPD
  - Inclusion criteria: age 45–65 years; English speaking; and self-reported onset of a physical disability for at least 5 years.
  - Exclusion criterion: the presence of a cognitive impairment that precludes answering survey questions reliably.
- **Measures:** Selected in consultation with community agencies.

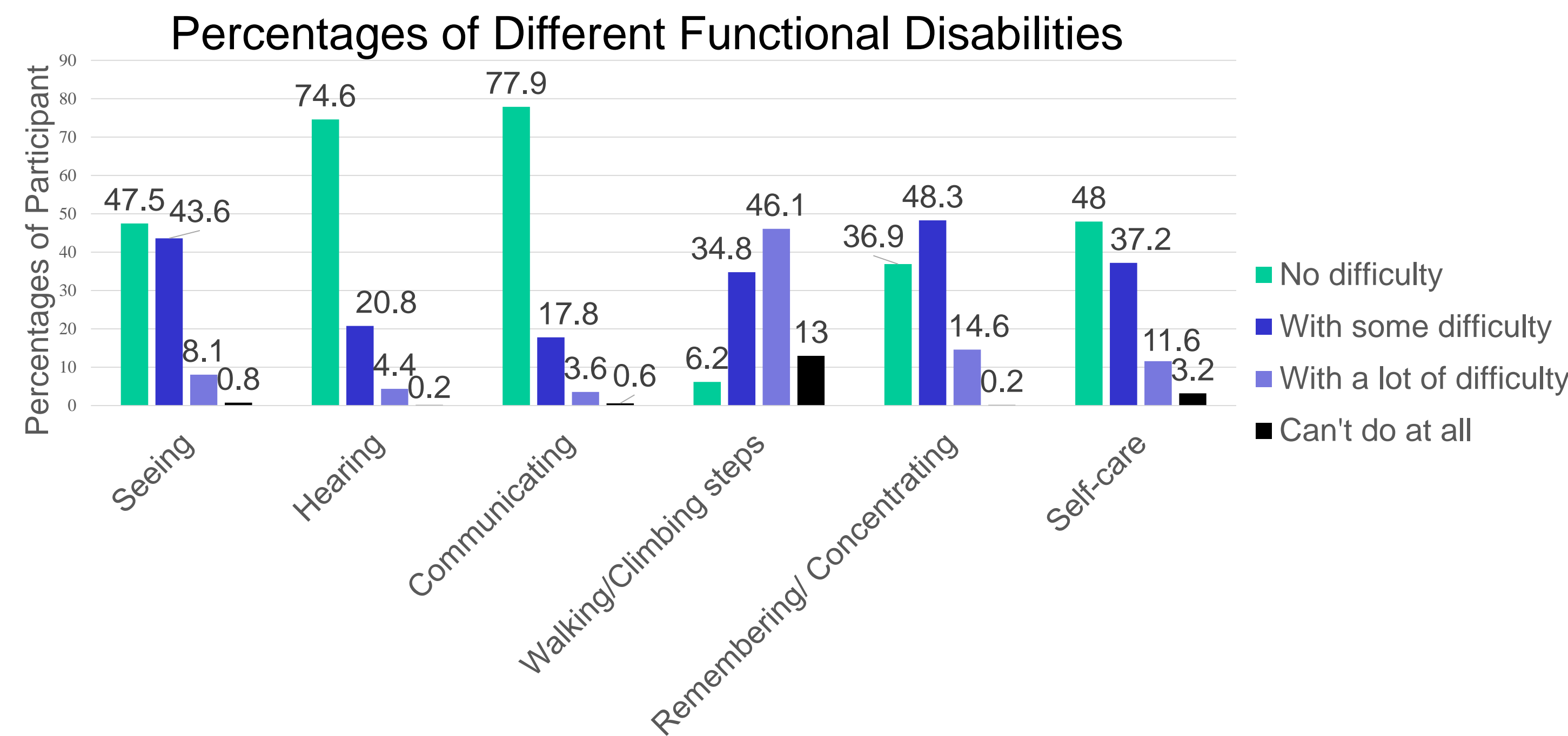
Demographics	Health & Function	Social Participation
<ul style="list-style-type: none"> <li>• Age</li> <li>• Sex</li> <li>• Race/ethnicity</li> <li>• Marital status</li> <li>• Education</li> <li>• Income &amp; Source</li> <li>• Employment status</li> <li>• Living arrangement</li> <li>• Food security</li> <li>• Health insurance</li> <li>• Years of primary disability</li> </ul>	<ul style="list-style-type: none"> <li>• Physical health*</li> <li>• Mental health*</li> <li>• Physical function with mobility aid<sup>a</sup></li> <li>• Pain<sup>b</sup></li> <li>• Fatigue<sup>b</sup></li> <li>• Depression<sup>b</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Ability to participate in social roles and activities<sup>b</sup></li> <li>• Satisfaction with participation in social roles and activities<sup>b</sup></li> </ul>
	<p>* self-reported single question, on a 5-point scale, excellent to poor.</p>	<p><sup>a</sup> PROMIS measures-short form <sup>b</sup> PROMIS measures-CAT version</p>

## Methods (cont.)

- **Data analysis:**
  - Chi-square test of independence: associations between age groups and sociodemographic variables.
  - ANOVA: differences in AwD symptoms, physical function, and disability years among age groups.
  - Independent t-test and ANOVA : differences in social participation measures across demographic groups.

## Results

- **Participants' Residence State:**
  - Missouri: 70%; Illinois: 6.5%; 28 additional states: each with ≤2%
- **Primary causes of physical disability:**
  - Neurological cause: 37%
  - Musculoskeletal cause: 26%

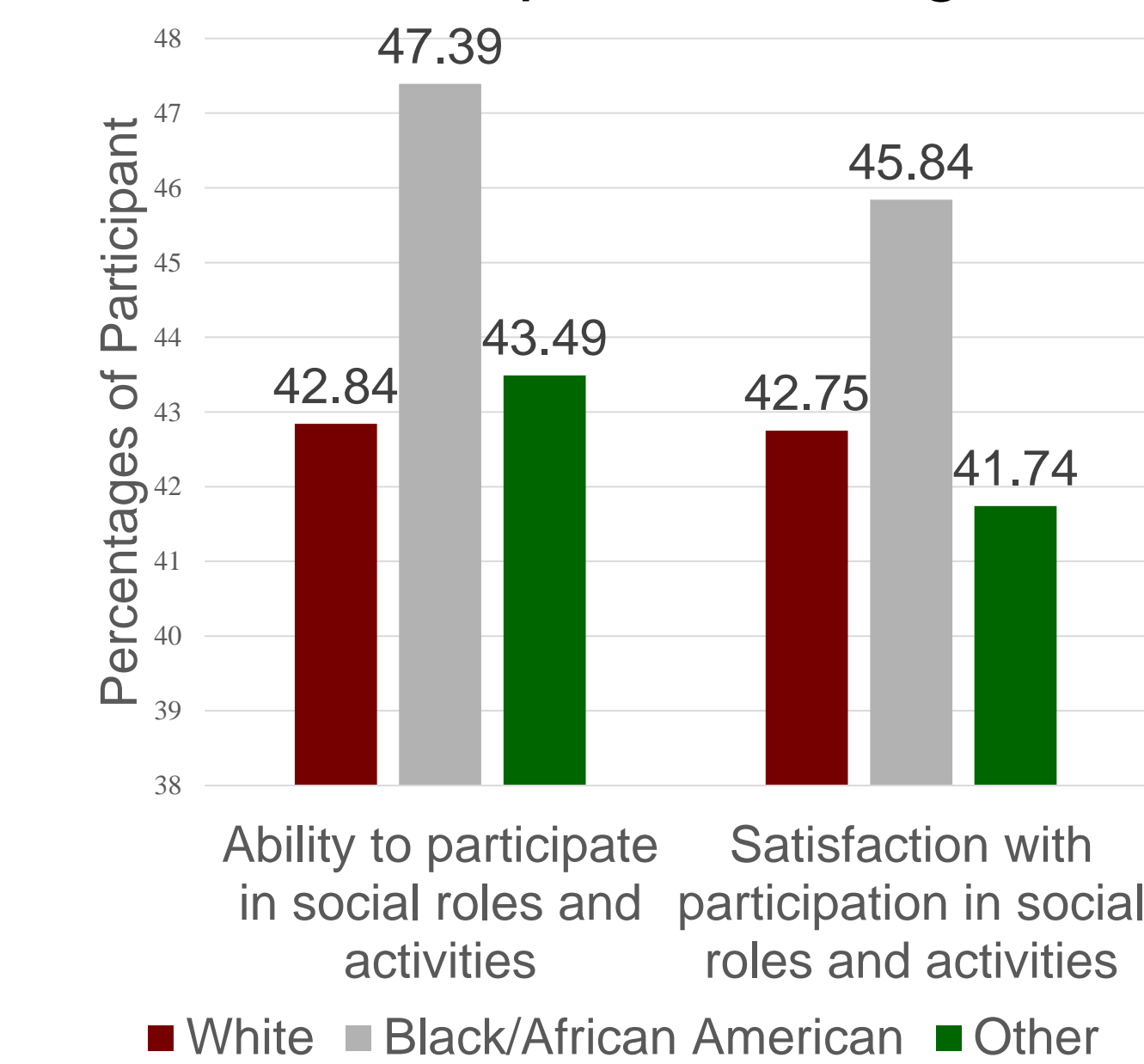


Sociodemographic profile of the cohort by age group (*p ≤ .05)					
Sociodemographic, Health, and Function	Total n = 474	Ages 45–54 n = 149	Ages 55–60 n = 178	Ages 61–65 n = 147	X <sup>2</sup> or F test
Age, mean	56.8	--	--	--	--
Sex at birth, female <sup>†</sup>	314 (66.2)	50 (33.6)	59 (33.2)	51 (34.7)	0.96
Race/ethnicity					2.58
White	291 (61.4)	92 (61.7)	111 (62.4)	88 (59.9)	
Black/African American	<b>125 (26.4)</b>	35 (23.5)	46 (25.8)	44 (29.9)	
Other	<b>58 (12.2)</b>	22 (14.8)	21 (11.8)	15 (20.2)	
Marital status, married/partnered <sup>†</sup>	<b>180 (37.8)</b>	69 (46.3)	<b>58 (32.6)</b>	<b>53 (36.1)</b>	6.82*
Education <sup>a</sup>					3.25
High-school diploma or less	138 (29.2)	37 (24.8)	55 (31.1)	46 (31.3)	
Associate degree or some college/advanced training	181 (38.3)	60 (40.3)	62 (35.0)	59 (40.1)	
Bachelor degree/graduate degree	154 (32.6)	52 (34.9)	60 (33.9)	42 (28.6)	
Employment status <sup>a</sup>					33.75*
Paid work, full- or part-time	<b>87 (18.4)</b>	47 (31.5)	<b>26 (14.8)</b>	<b>14 (9.5)</b>	
Seeking paid work <sup>b</sup>	14 (3.0)	--	--	--	
Retired, not seeking work, other	85 (18.0)	19 (12.8)	27 (15.3)	39 (26.5)	
Disability leave	286 (60.6)	78 (52.4)	117 (66.5)	91 (61.9)	
Living arrangement <sup>a</sup> , live along <sup>†</sup>	<b>197 (41.7)</b>	42 (28.2)	<b>86 (48.3)</b>	<b>69 (47.3)</b>	16.26*
Years living with disability, mean	19.0	16.6	19.6	20.7	F=3.61*
Personal annual income, ≤\$10,008 <sup>†</sup>	<b>166 (35.0)</b>	56 (37.6)	59 (33.2)	51 (34.7)	.71

## Results (Cont.)

Sociodemographic profile of the cohort by age group (*p ≤ .05) (cont.)					
Sociodemographic, Health, and Function	Total n = 474	Ages 45–54 n = 149	Ages 55–60 n = 178	Ages 61–65 n = 147	X <sup>2</sup> or F test
Sources of income					
Paid employment	107 (22.6)	52 (34.9)	34 (19.1)	21 (14.3)	19.96*
Unemployment benefits <sup>b</sup>	6 (1.3)	--	--	--	--
Work-related disability benefits	50 (10.6)	13 (8.7)	22 (12.5)	15 (10.2)	1.16
SSDI & Social Security Retirement	341 (71.9)	91 (61.1)	131 (73.6)	119 (81.0)	14.87*
SSI (federal income supplement)	64 (13.5)	16 (10.7)	27 (15.2)	21 (14.3)	1.48
Veterans' disability/retirement benefits <sup>b</sup>	14 (3.0)	--	--	--	--
Retirement pension, savings	58 (12.2)	10 (6.7)	23 (12.9)	25 (17.0)	7.43*
Assistance from family/friends	39 (8.2)	15 (10.1)	14 (7.9)	10 (6.80)	1.09
Health insurance held					
Medicare	275 (58.0)	73 (49.0)	116 (65.2)	86 (58.5)	8.73*
Missouri Medicaid program	180 (38.0)	55 (36.9)	75 (42.1)	50 (34.0)	2.36
Military healthcare/TRICARE	28 (5.9)	4 (2.7)	9 (5.1)	15 (10.2)	7.90*
Private health insurance	159 (33.5)	54 (36.2)	54 (30.3)	51 (34.7)	1.39
None <sup>b</sup>	15 (3.2)	--	--	--	--
Physical health					11.35
Excellent/very good	45 (9.5)	22 (14.9)	13 (7.3)	10 (6.9)	
Good	122 (25.9)	36 (24.3)	47 (26.4)	39 (26.7)	
Fair	192 (40.7)	62 (41.9)	66 (37.1)	64 (43.8)	
Poor	113 (23.9)	28 (18.9)	52 (29.2)	33 (22.6)	
Mental health					10.13
Excellent/very good	134 (28.3)	44 (29.7)	43 (24.2)	47 (32.0)	
Good	150 (31.7)	56 (37.8)	52 (29.2)	42 (28.6)	
Fair	154 (32.6)	36 (24.3)	69 (38.8)	49 (33.3)	
Poor	35 (7.4)	12 (8.1)	14 (7.9)	9 (6.1)	
Physical function- mean	<b>35.7</b>	35.3	35.3	36.5	F=1.07
Fatigue, mean	<b>59.0</b>	58.4	59.9	58.4	F=1.44
Pain, mean	<b>60.4</b>	59.3	61.0	60.8	F=1.24
Depression, mean	<b>54.9</b>	54.1	56.0	54.2	F=1.90

## Social Participation among Races



## More Data Can Be Found Here:

The published manuscript relates to this presentation: Morgan, K. A., Putnam, M., Espin-Tello, S. M., Keglovits, M., Campbell, M., Yan, Y., ... & Stark, S. (2022). Aging with long-term physical disability: Cohort analysis of survey sample in the US. *F1000Research*, 11(68), 68.

Scan the QR code



## Conclusion

- There were some significant differences in demographics among age groups, but not in health and function.
- The cohort has a similar presence of AwD symptoms as other studies.
- The Black/African American has higher social participation than other races.
- The cohort has relatively more Non-White than other studies; the findings can inform future intervention and programs for facilitating participation.