

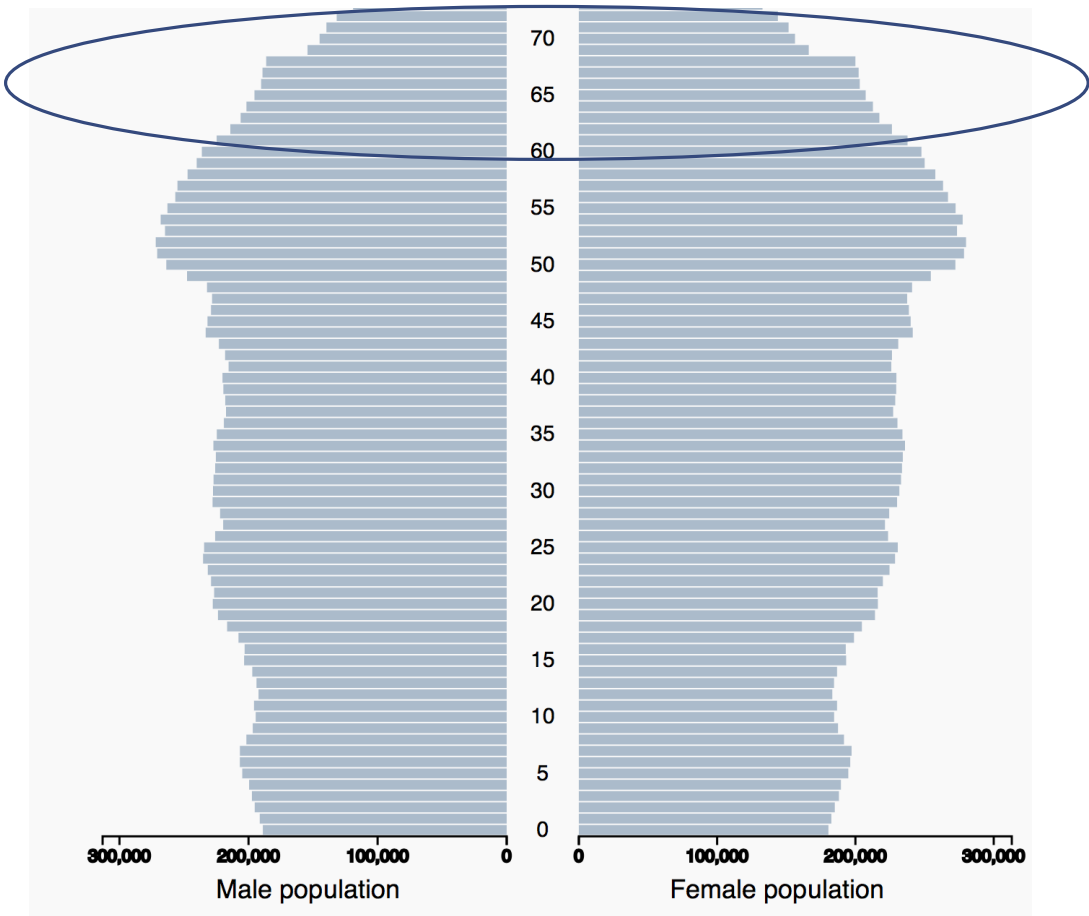


DISCRETIONARY AND NON-DISCRETIONARY TRAVEL IN OLDER AGE: EXAMINING THE TIME SPENT TRAVELING AND TRAVEL ENGAGEMENT IN AGING CANADIANS

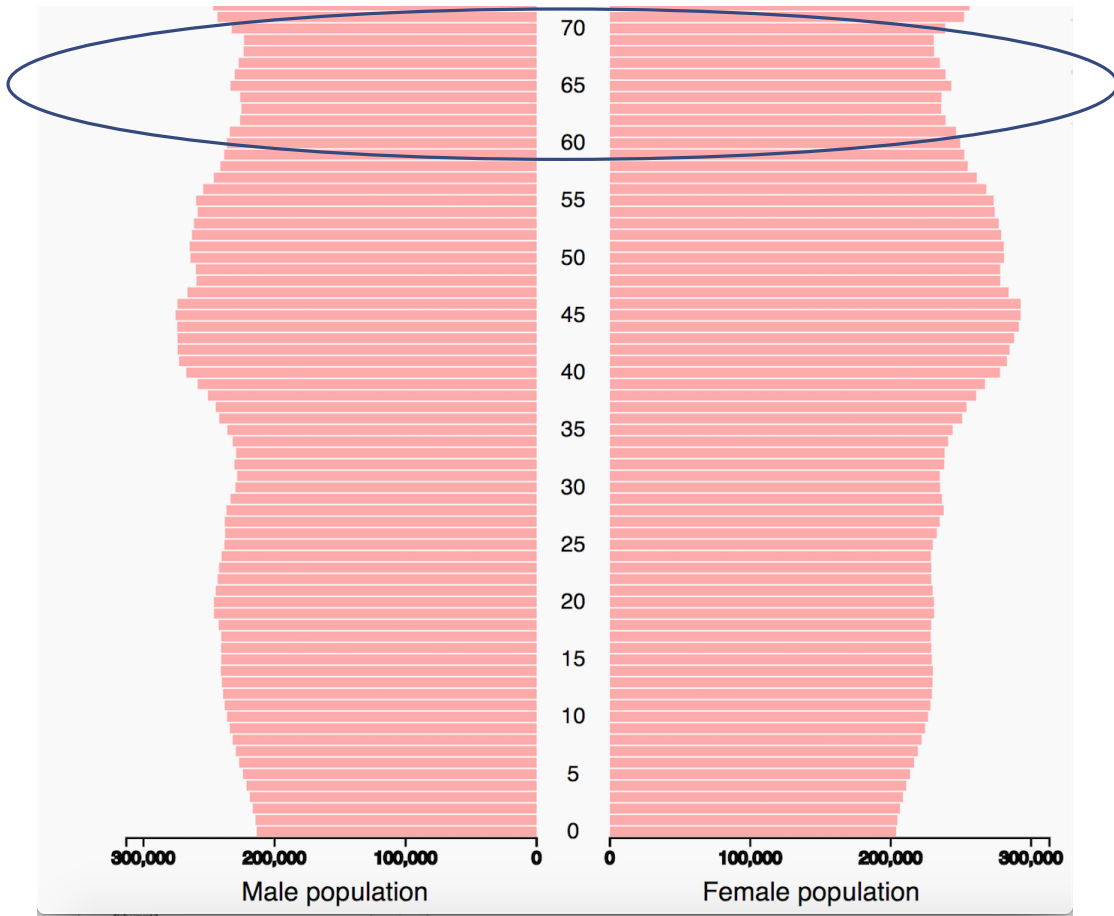
Bezirgani, A. & Lachapelle, U.
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DEMOGRAPHIC CHANGES

2015



2036



Source: Statistiques Canada

LITERATURE REVIEW

Major policy goals

- Favor independence, subjective well-being and health (WHO, 2011)
- “Aging well” (United Nations, 2015)

HOW TRANSPORT POLICIES CAN CONTRIBUTE TO THE ACHIEVEMENT OF THOSE GOALS

By taking in account older people's needs in service development

- Travel mode use was associated with a better quality of life (Deka, 2016)
- Availability of travel modes makes older people independent (Levasseur et al, 2015)
- Less travel is associated with less activity participation, social disadvantage and isolation (Deka, 2016; Ryan, 2015)

TRAVEL PATTERNS IN OLDER AGE

Discretionary

- Not required
- Going to leisure and social activities



Non-discretionary

- Required
- Grocery shopping, doctor



WHAT SPEAKS FOR MORE/ OR LESS TRAVEL?

Increase in trip engagement (Van den Berg, Arentze & Timmermans, 2011)

- More frequent trip engagement in discretionary travel
- Decrease in non-discretionary travel (e.g. retired)

Decrease in trip engagement

- Less frequent travel engagement, short distances (Schönfelder & Axhausen, 2003)
- Car-dependence, driving cessation (Siren & Haustein, 2015)

RESEARCH QUESTIONS

Do older adults travel more for discretionary purposes than for non-discretionary purposes?

What factors favor travel engagement for discretionary and non-discretionary purposes?

- What is the role of available travel options?
- What other characteristics underlie more (/less) travel in older age?

METHOD

Times use, stress and well-being survey data (Statistics Canada, 2011)

- Time use data on 24 hours
- Socio-demographic characteristics
- Availability of travel options
- $N=4765$ (60+ years old)

DEPENDENT VARIABLES

- Total time spent traveling for maintenance, leisure and socializing
- Binary outcome for travel engagement (0/1)

Maintenance

- Time spent traveling to/from unpaid domestic work
- Time spent traveling for shopping or obtaining services

Leisure

- Time spent traveling to/from outdoor activities
- Time spent traveling to/from hobbies

Social

- Time spent traveling to/from socializing at private residences
- Time spent traveling to/from other socializing (bars, weddings)

INDEPENDENT VARIABLES

Socio-demographic characteristics

- Age, marital status, retirement status

Availability of motorized transport options

- Valid driving license, public transit at walking distance

Possibilities to use active travel options (Health and physical activity impairments)

- Difficulties walking or climbing stairs

SAMPLE DESCRIPTION

Socio-demographic characteristics

- 53.62 % females
- 69.60 % were with a life partner
- 63.82 % were retired

Availability of travel options

- 85.22 % had a valid driving license
- 62.80 % had public transit at walking distance
- 61.89 % declared to have physical activity limitations

RELATIONSHIP BETWEEN AGE, SEX AND AVAILABILITY OF TRAVEL OPTIONS

- Availability of cars differs across age and gender groups
- Availability of PT does not differ across age and gender groups

	Men (%)			Women (%)			Total (%)		
	Has a valid driving license	A car is available	PT is at walking distance	Has a valid driving license	A car is available	PT is at walking distance	Has a valid driving license	A car is available	PT is at walking distance
Age									
60–64	96.30	96.09	63.78	91.06	94.78	62.30	93.59	95.41	63.02
65–69	95.26	96.17	61.88	86.42	93.28	61.66	90.72	94.69	61.77
70–74	95.13	96.01	60.39	87.98	93.31	64.26	91.29	94.56	62.46
75–79	93.46	95.44	59.63	65.11	82.88	68.55	77.97	88.58	64.50
80 years old or older	82.24	89.00	61.20	49.37	67.14	63.89	62.78	76.06	62.80
Total	93.37	94.94	61.85	78.16	87.37	63.62	85.22	90.88	62.80

AVAILABILITY OF PRIVATE AND PUBLIC TRAVEL OPTIONS FOR WOMEN BASED ON RETIREMENT AND MARITAL STATUS

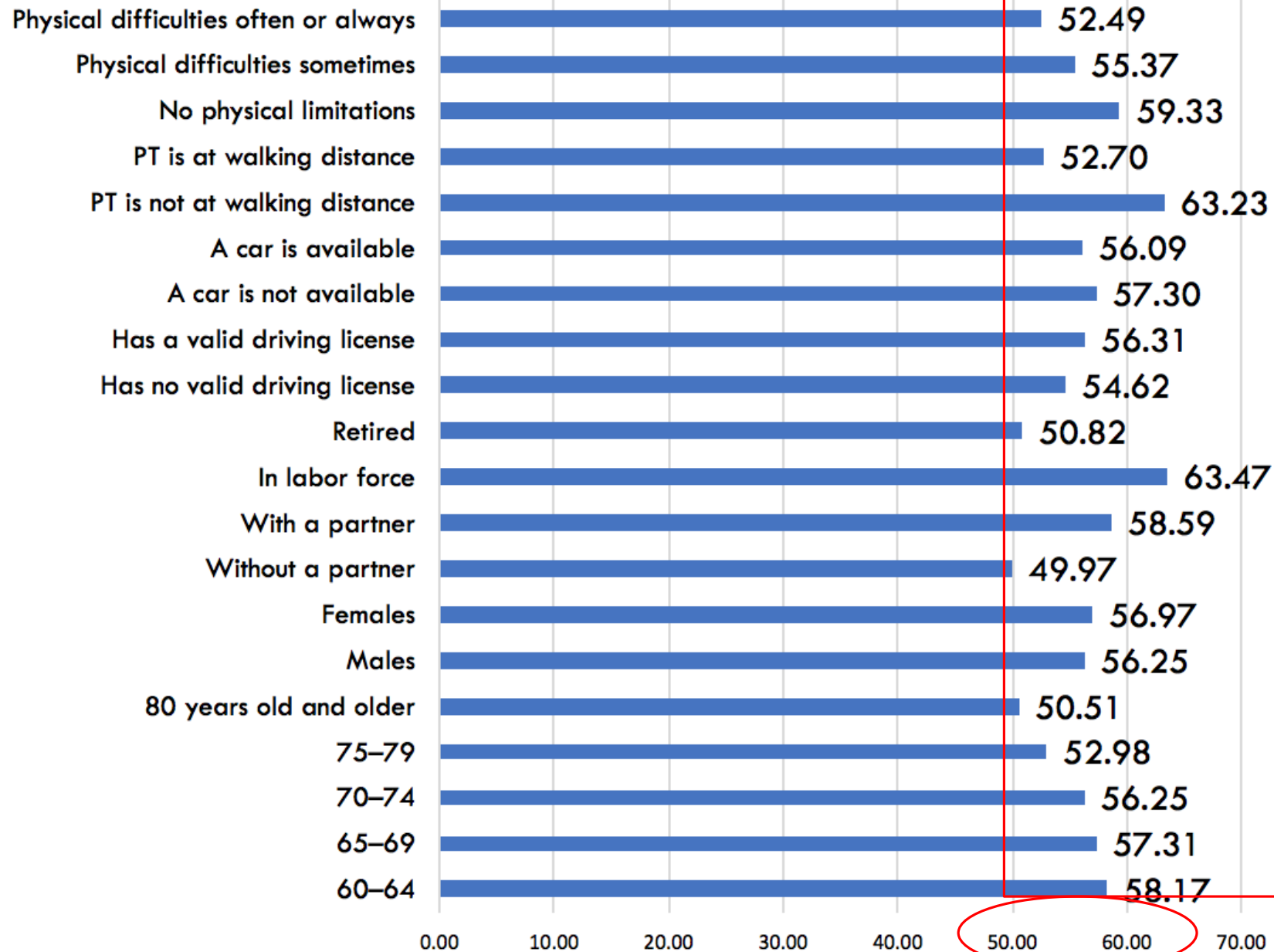
- Availability of travel options differed in men and women
- Women are more vulnerable than men
- Availability of private travel options is smaller in retired and single women
- Public transport is available regardless of the retirement or marital status

	Women		
	Has a valid driving license	A car is available	Has PT at walking distance
Retirement Status			
In labor force	80.60 %	89.45 %	61.46 %
Retired	76.61 %	86.05 %	65.01 %
Marital status			
Without a partner	66.22 %	74.41 %	68.45 %
With a partner	86.76 %	96.71 %	60.15 %

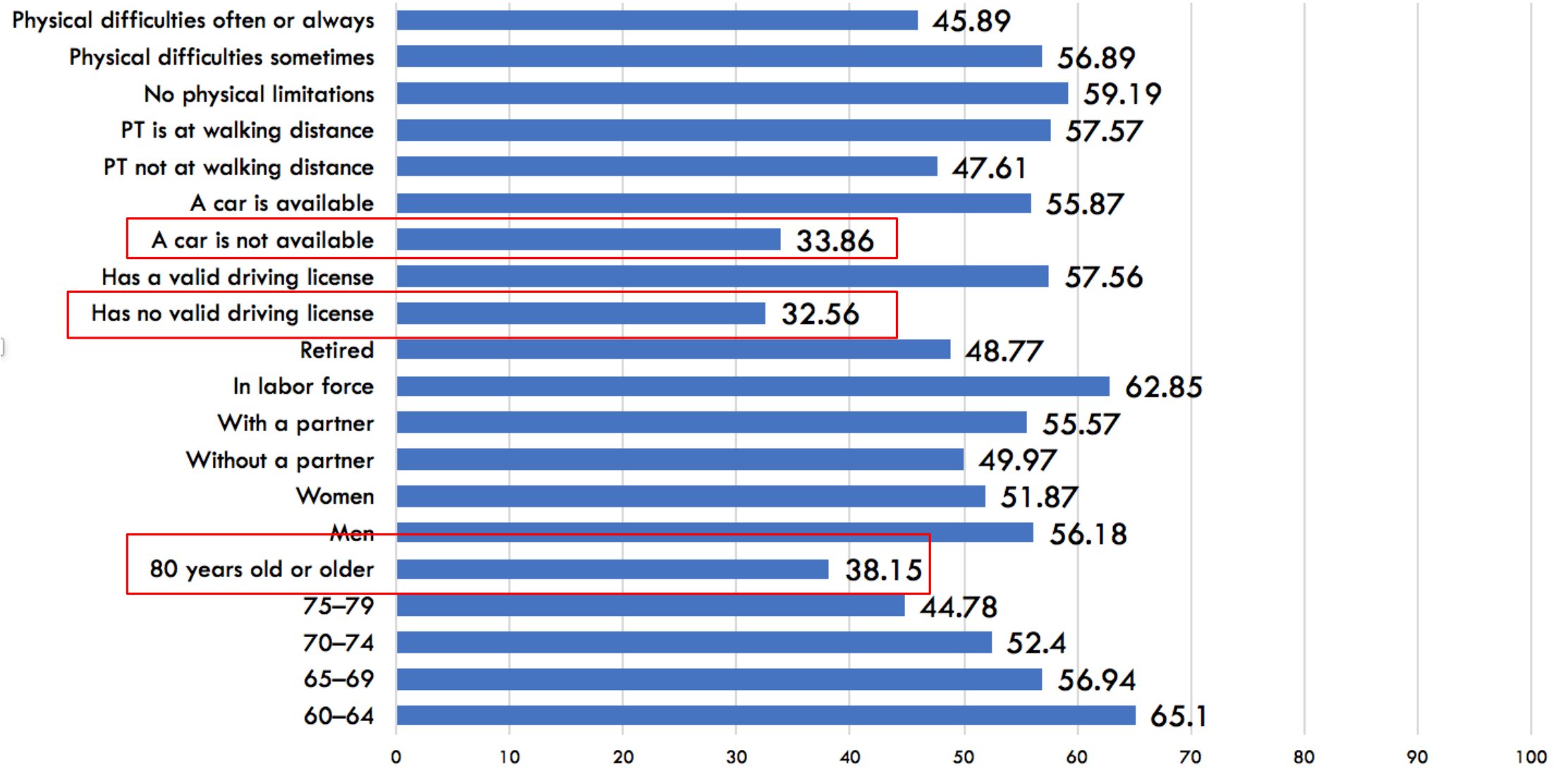
TIME SPENT TRAVELING

	Maintenance Mean (%Traveled)	Leisure Mean (%Traveled)	Socializing Mean (%Traveled)
Socio-demographic characteristics			
60–64	58.17 (65.10 %)	43.15 (30 %)	47.07 (28.11 %)
65–69	57.31 (56.94 %)	42.54 (28.24 %)	47.71 (32.37 %)
70–74	56.25 (52.40 %)	44.95 (29.02 %)	49.82 (31.37 %)
75–79	52.98 (44.78 %)	44.34 (21.39 %)	47.21 (23.39 %)
80 years old and older	50.51 (38.15 %)	39.61 (21 %)	58.53 (23 %)
Males	56.25 (56.18 %)	45.52 (28.49 %)	51.44 (27.54 %)
Females	56.97 (51.87 %)	40.49 (25.27 %)	47.64 (28.60 %)
Without a partner	49.97 (49.97 %)	42.95 (24.78 %)	43.71 (29.17 %)
With a partner	58.59 (55.57 %)	42.98 (27.63 %)	51.97 (27.64 %)
In labor force	63.47 (62.85 %)	38.34 (25.23 %)	53.69 (26.62 %)
Retired	50.82 (48.77 %)	45.37 (27.63 %)	47.11 (28.95 %)
Available transport options			
Has no valid driving license	54.62 (32.56 %)	47.69 (15.55 %)	45.82 (18.16 %)
Has a valid driving license	56.31 (57.56 %)	42.53 (28.71 %)	49.74 (29.83 %)
A car is not available	57.30 (33.86 %)	46.32 (10.48 %)	40.24 (16.67 %)
A car is available	56.09 (55.87 %)	42.85 (28.40 %)	49.89 (29.25 %)
PT is not at walking distance	63.23 (47.61 %)	45.31 (26.09 %)	45.80 (28.33 %)
PT is at walking distance	52.70 (57.57 %)	41.64 (27.16 %)	51.51 (27.98 %)
No physical limitations	59.33 (59.19 %)	42.48 (29.95 %)	48.40 (29.99 %)
Physical difficulties sometimes	55.37 (56.89 %)	41.73 (26.16 %)	50.69 (29.05 %)
Physical difficulties often or always	52.49 (45.89 %)	44.66 (23.79 %)	49.47 (25.37 %)

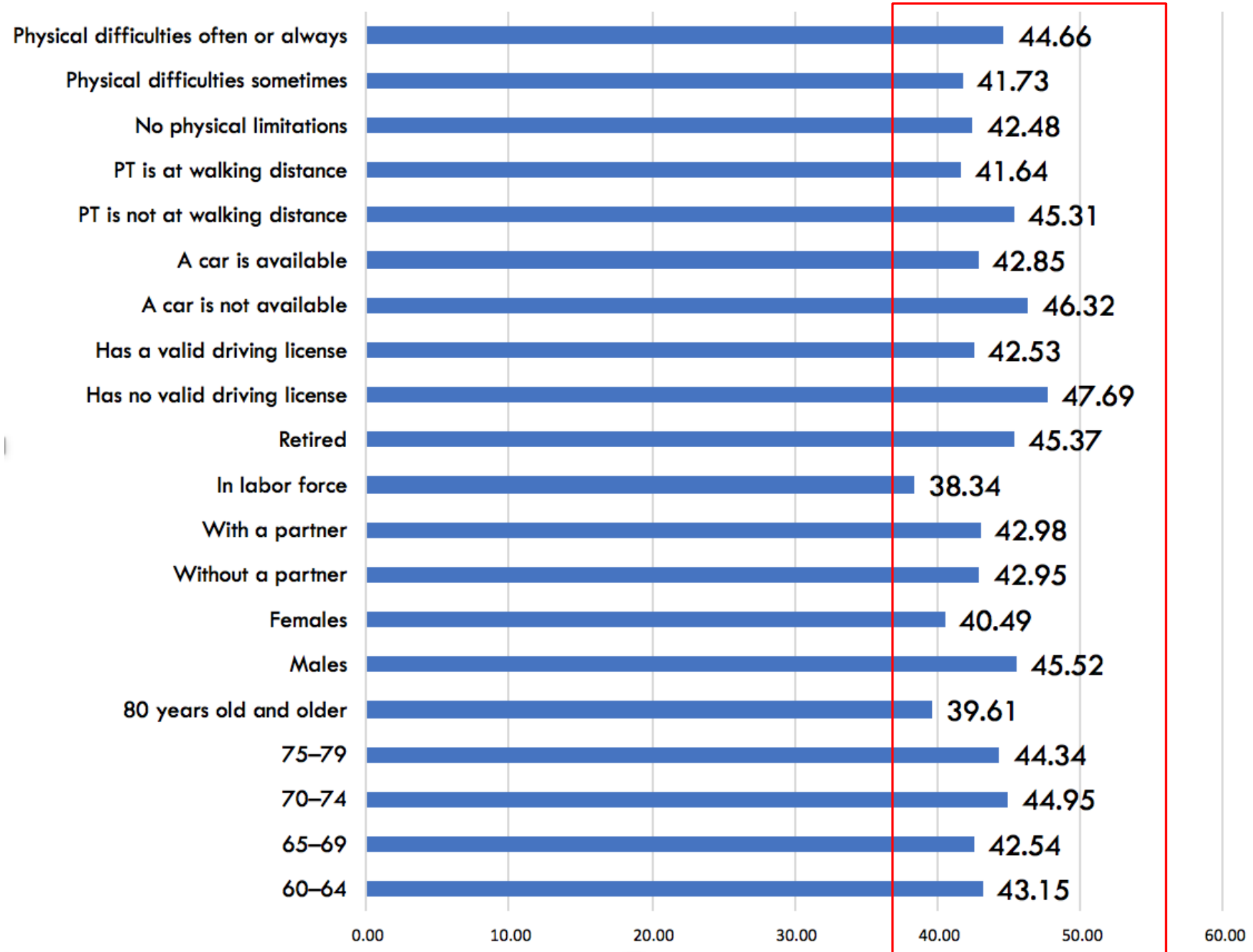
Time spent traveling for maintenance



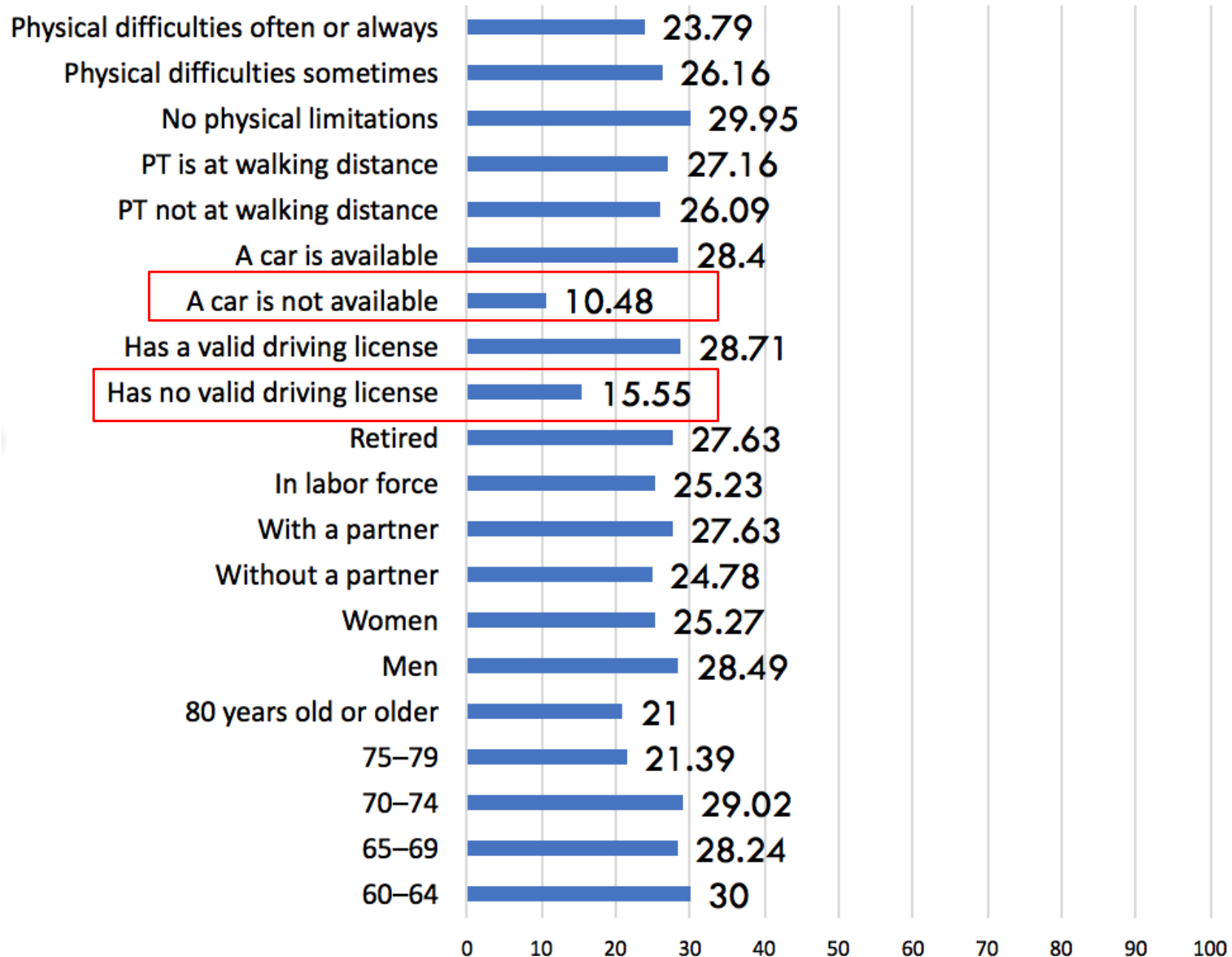
Maintenance - % traveled



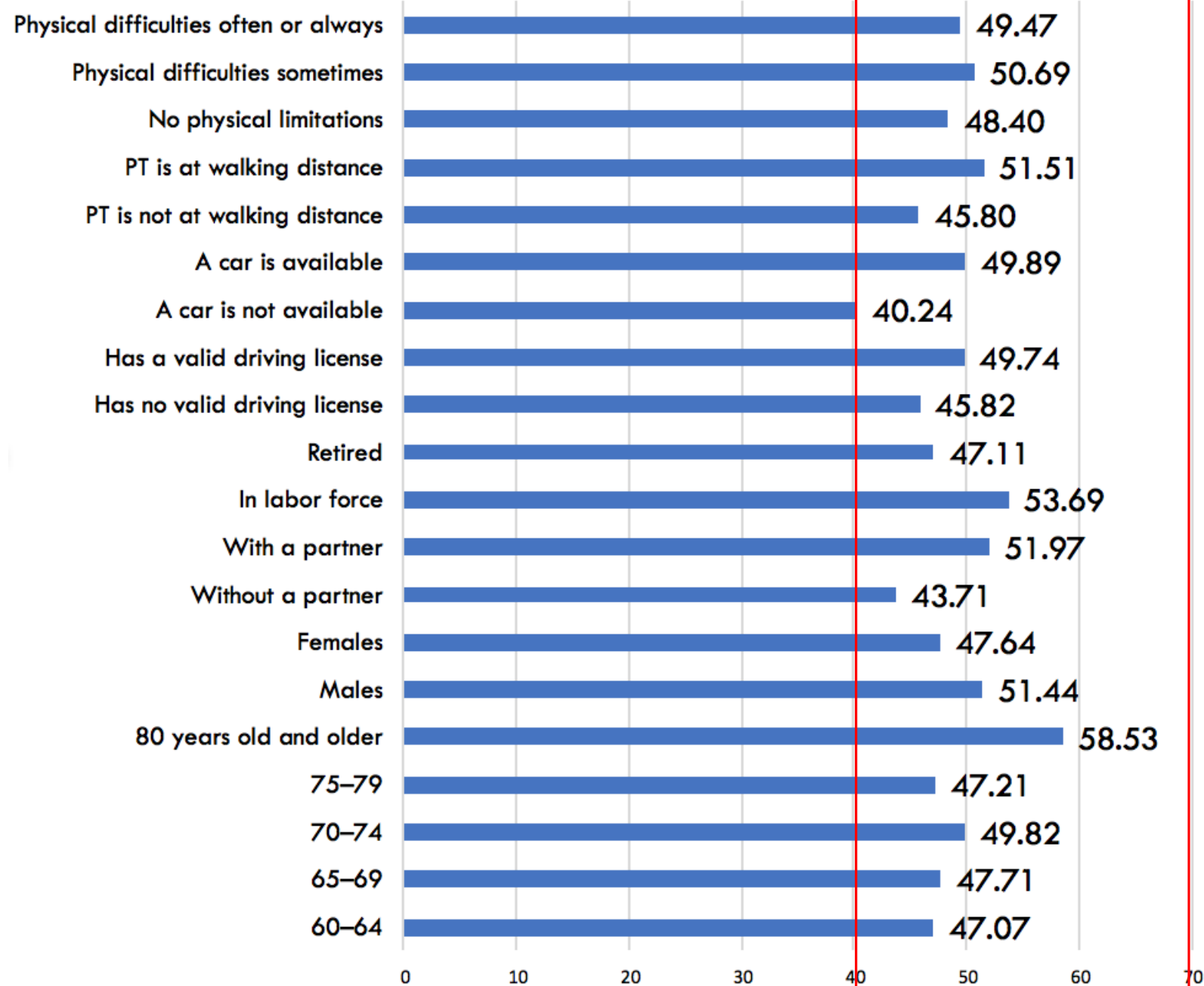
Time spent traveling for leisure



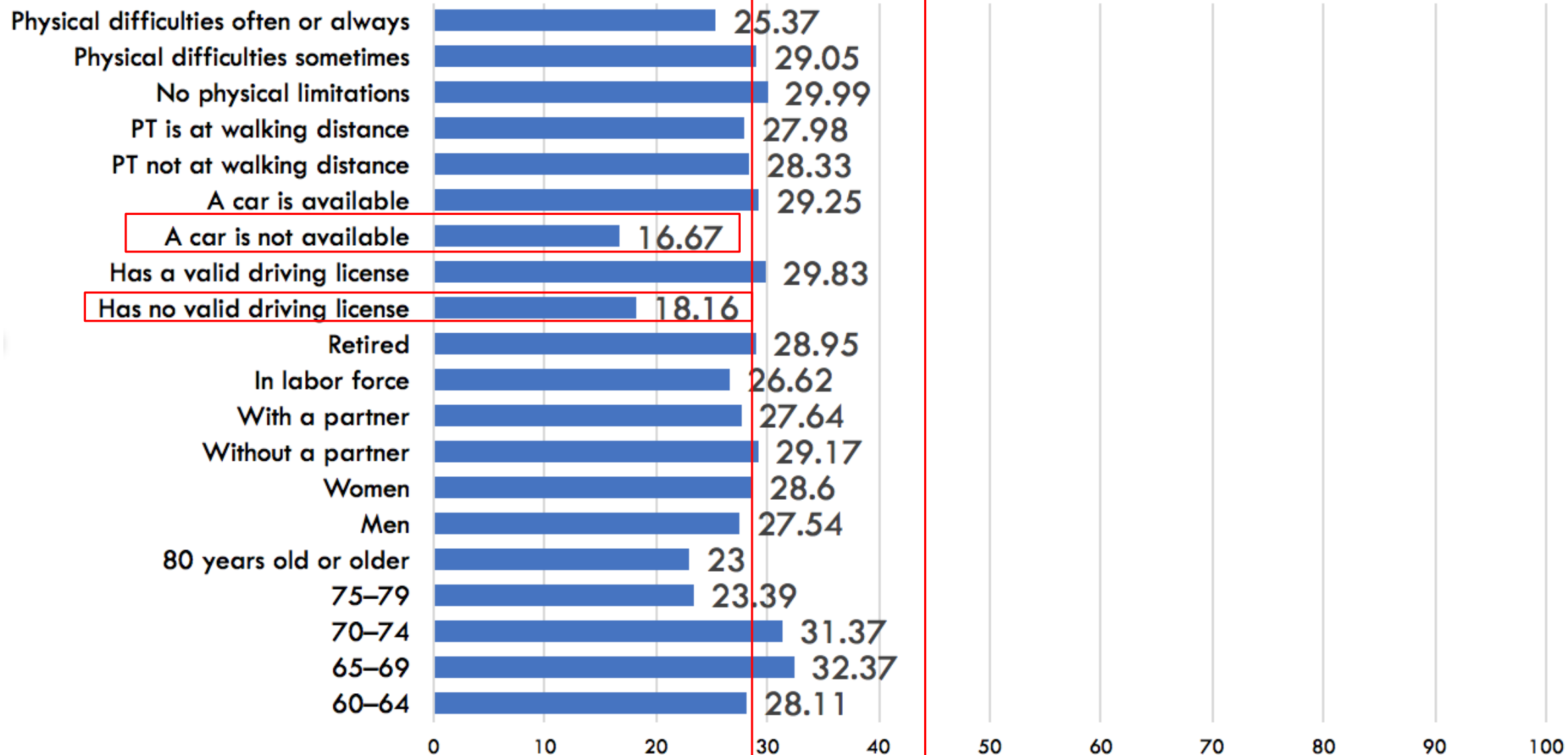
Leisure - % traveled



Time spent traveling for socializing



To socialize - % traveled



	Travel engagement for maintenance purposes	Travel engagement for leisure time purposes	Travel for socializing purposes
Socio-demographic characteristics			
60–64	1.47**	1.11	0.90
65–69	1.17	0.96	1.06
70–74 (ref.)			
75–79	0.85	0.71*	0.71*
80 years old or older	0.73*	0.77	0.73*
Men	1.09	1.07	0.90
Women (ref.)			
Without a partner	1.12	1.06	1.26*
With a partner (ref.)			
Retirement status			
Is not retired (is professionally active) (ref.)			
Is retired from work	0.65***	1.26*	1.18
Available transport options			
Does not have a valid driving license	0.43***	0.52***	0.53***
Has a valid driving license (ref.)			
Public transit is not available at walking distance (ref.)			
Public transit is available at walking distance	1.60***	1.08	0.99
Health and activity limitations			
No difficulty (ref.)			
Difficulty sometimes	1.03	0.88	0.99
Difficulty often or always	0.75**	0.83	0.89
Constant	1.23	0.36***	0.44***
Fit statistics			
Observations	4 765	4 765	4 765
LL(base)	-2274.016	-1913.978	-1957.051
LL(model)	-2139.519	-1881.806	-1928.233
X ² (11)	216.2	46.4	49.3
Significance	0.000	0.000	0.000
Pseudo R-square	0.059	0.017	0.015
Cragg & Uhler's R ² (Nagelkerke's R ²)	0.089	0.024	0.021

Note: * p < 0.05, ** p < 0.01, *** p < 0.001

MAIN RESULTS AND RECOMMENDATIONS FOR POLICY MAKERS

- Having a valid driving license was the strongest factor for travel engagement
 - Policies should anticipate driving cessation, by promoting the use of other travel possibilities than the car
- Public transit at walking distance was not significantly associated with travel engagement
 - Address in more detail what makes public transit non-significant
- Health and physical activity limitations were associated with less engagement in non-discretionary travel
 - Suggest travel possibilities for individuals who have frequent physical activity limitations
- Retired and single women have less possibilities to use private travel modes, and are therefore more likely to be excluded

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