THURSDAY, JULY 20TH 2023

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Immobility as a matter of public concern?

Staying at home for a day or more

- A fundamental right...
- Questioned as "soft refusal" by transport statisticians...
- Still raises issues of social exclusion...
- Renewed by lock-downs imposed on us during the pandemic...

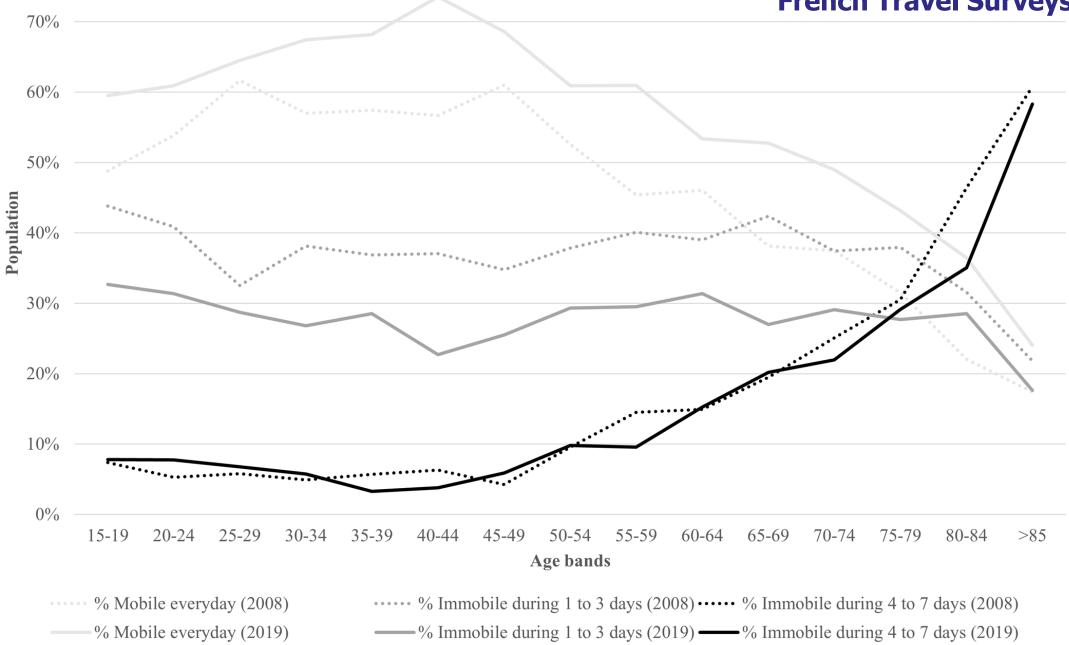
A new question introduced in 2008 French National Transport Survey, reproduced in 2019 (~ 14 000 households) :

"For a week, are there days when you didn't leave home (or your garden)?

- Yesterday
- The day before yesterday
- Day 3
- ...
- Day 7
- I went out everyday"



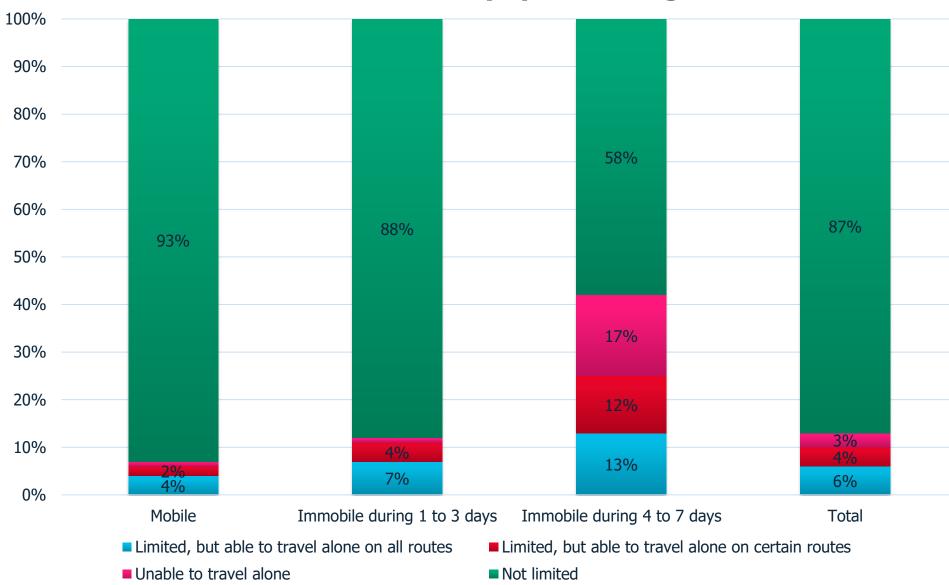
Immobility through life cycle in French Travel Surveys



80%

Sources: French Travel Surveys

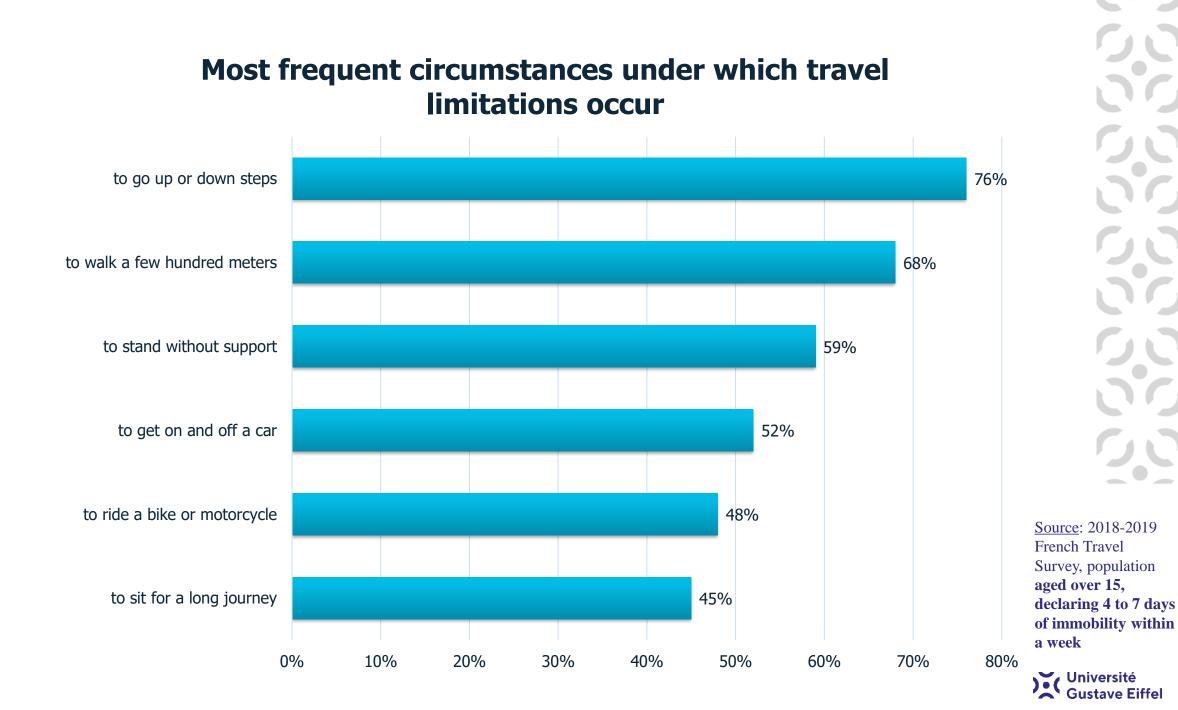
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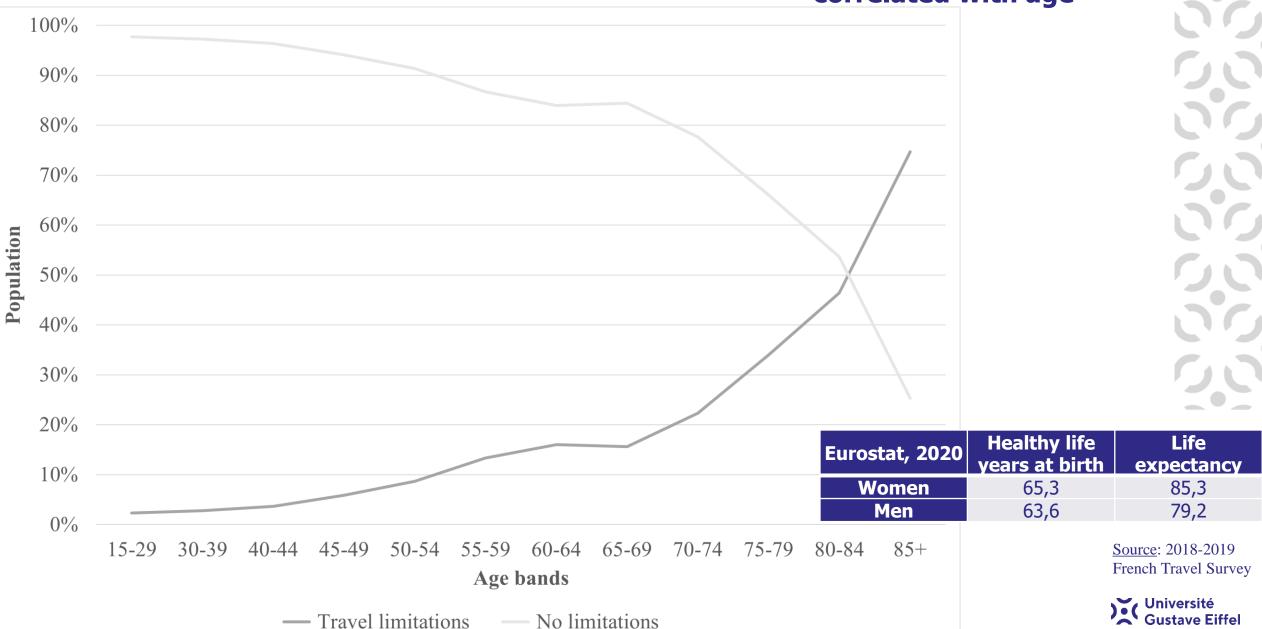
Travel limitations of the population aged over 15

Source: 2018-2019 French Travel Survey





Travel limitations are strongly correlated with age

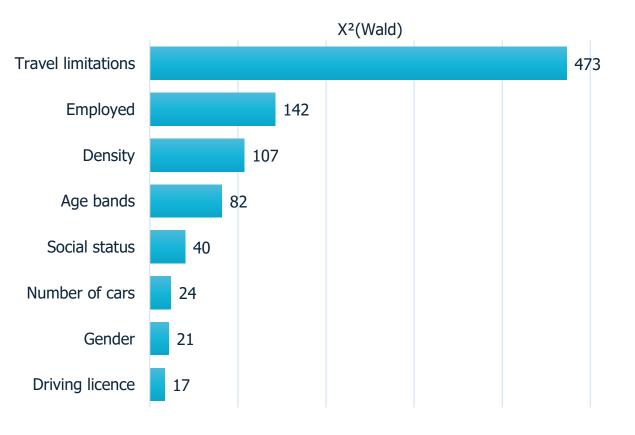


Capturing structural effects on frequent immobility through a logit model

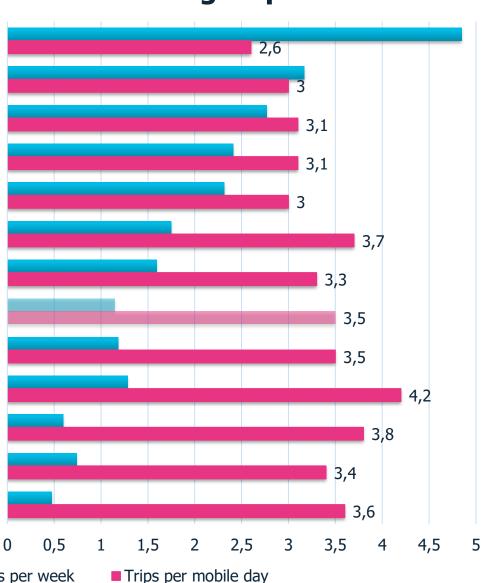
Variables selected based on their Chisquare contribution to the full model

- At individual level: age-band, gender, active (yes/no), employed (yes/no), socio-professional status in 8 classes, driving license, car ownership, travel limitations, disability;
- At household level: composition, size, number of active persons, number of cars, number of persons facing travel limitations, income (per consumer unit), residential profile (within 2020 urban areas), density.

Factors influencing frequent immobility (4 to 7 days a week)







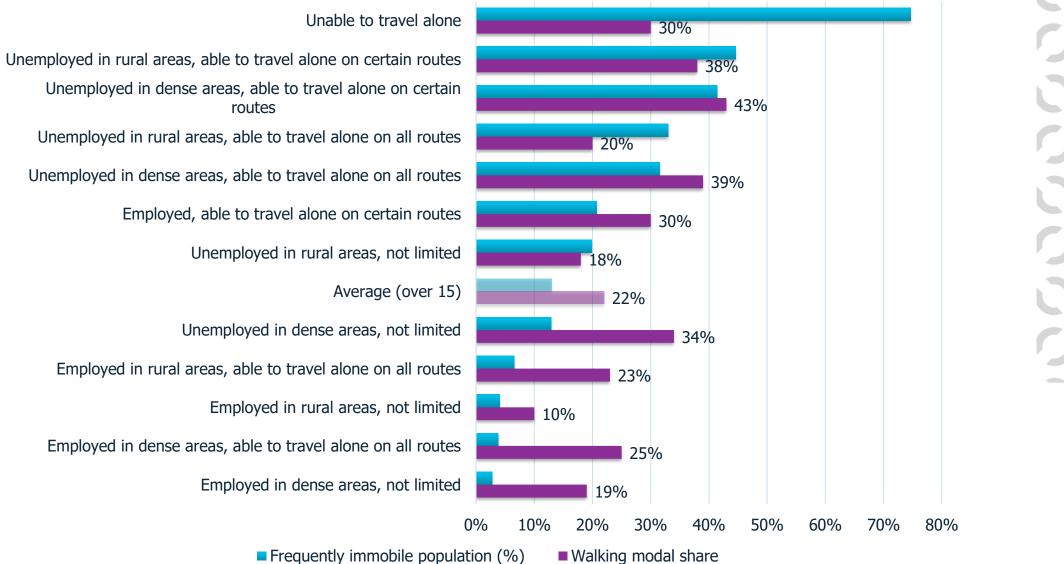
Travel characteristics of different groups

Unable to travel alone Unemployed in rural areas, able to travel alone on certain routes Unemployed in dense areas, able to travel alone on certain routes Unemployed in rural areas, able to travel alone on all routes Unemployed in dense areas, able to travel alone on all routes Employed, able to travel alone on certain routes Unemployed in rural areas, not limited Average (over 15) Unemployed in dense areas, not limited Employed in rural areas, able to travel alone on all routes Employed in rural areas, not limited Employed in dense areas, able to travel alone on all routes Employed in dense areas, not limited

Average number of immobile days per week



Walking characteristics of different groups





Conclusion

Further research questions

- Dealing with multicollinearity : • disability vs travel limitations?
- Introducing circumstances in which • travel limitations occur?
- Focus on population targets : older • adults vs employed?
- Projecting immobility by 2070 • through an age-cohort model based on both 2007-08 and 2018-2019 survey?

What are the links between immobility and social isolation/loneliness?

- In 2022, 11% of the French ٠ population over 15 rarely or never meets (IRL) anyone belonging to one's social network (family, friends, colleagues, neighbours, civil society organizations) – back to pre-Covid figures, after a jump to 24% in 2021
- 20% declares a feeling of ٠ loneliness

What can be done about it?

Public space as social • infrastructure?

Our Epidemic of Loneliness and Isolation 2023

The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community







Hadrien RIFFAUT (direction de la recherche, Cerlis), Séverine DESSAJAN (Cerlis) et Delphine SAURIER (Audencia)



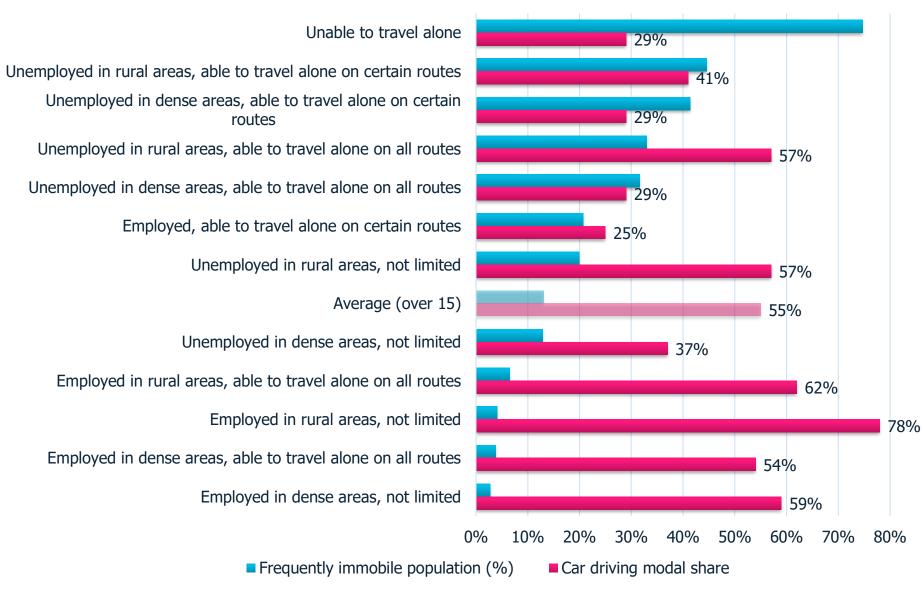




Variables	Levels of variables	Odds Ratio	Significance level (Chi2)
Residential density	Cities	Ref.	
	Towns & semi-dense areas	1.6	***
	Rural areas	2.0	***
	Very rural areas	2.8	***
Age bands	[15-25[Ref.	
	[25-35[1.9	***
	[35-55[2.4	***
	[55-65[2.3	***
	[65-75[2.7	***
	[75 or more[3.9	***
Gender	Men	Ref.	
	Women	1.3	***
Travel limitations	Limited, but able to travel alone on <u>all</u> routes	2.0	***
	Limited, but able to travel alone on <u>certain</u> routes	3.2	***
	Unable to travel alone	11.3	***
	Not limited	Ref.	
Employed	Yes	Ref.	
	No	4.4	***
Social status	Farm operators	5.2	***
	Craftsmen, merchants, employers (>=10 employees)	1.9	***
	Executives, liberal professions	1.2	ns
	Intermediate occupations	Ref.	
	Employees	1.5	**
	Workers	1.8	**
	Retired	1.4	*
	Other without professional activity	1.8	**
Number of cars	0	1.6	***
	1	1.2	**
	2 or more	Ref.	
Driving license	Yes	Ref.	
	No	1,4	***



Driving characteristics of different groups



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90%