

A group of people, including a child, riding bicycles on a paved path outdoors. The child in the foreground is wearing a red shirt and is reaching out towards another person. The background shows other cyclists and greenery.

TRANSPORT DURING THE CORONA LOCKDOWN

– *new potentials for transport modes among Danes?*

A survey compiled by the Coordination for Gender Research
in collaboration with the European TinnGO project

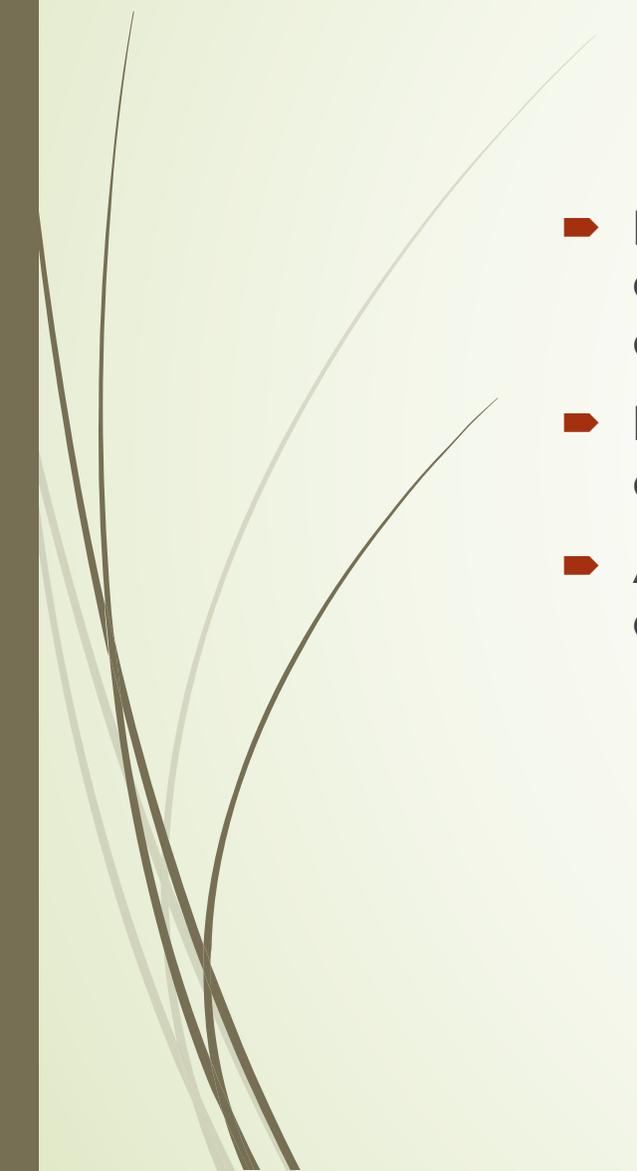


BACKGROUND AND MOTIVATION

- ▶ The Corona lockdown did particularly address the Danish population's use of transport
- ▶ Little is known about how recommendations to avoid public transport impact on different social groups
- ▶ There has been a call for a green reopening of society from various climate agendas
- ▶ The call for a momentary change in individual travel patterns opens a window for 'greener mobility modes'
- ▶ Little is known about if people are actually travelling 'greener'
- ▶ Little is known whether people are willing to continue their eventual more sustainable form of transportation



RESEARCH QUESTIONS

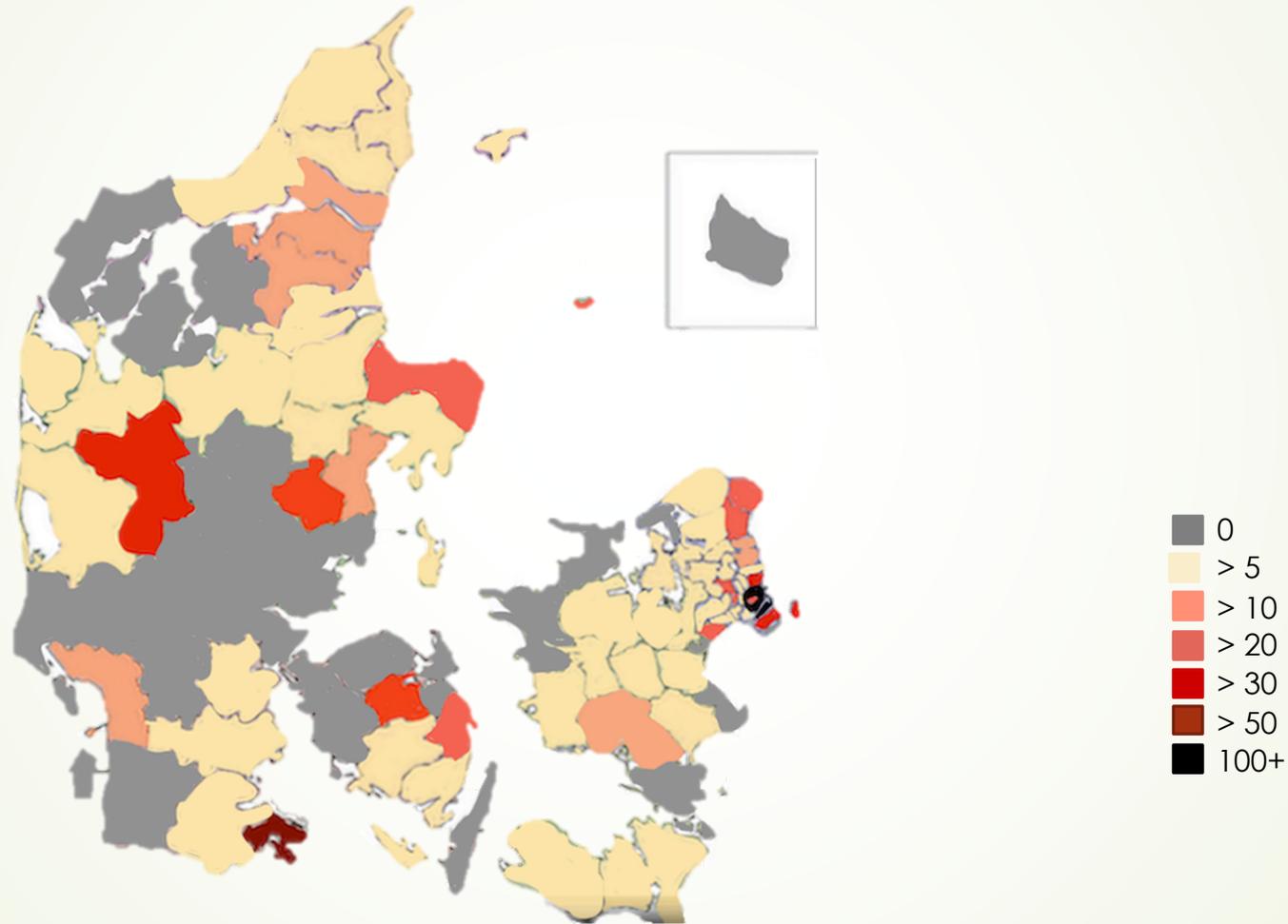


- ▶ Do various social groups (gender, age, class, ethnicity) have different opportunities in changing their use of transport during the Corona lock down?
- ▶ Have the Danish population (gender, age, class, ethnicity) changed their daily transport during the lock down?
- ▶ Are people (gender, age, class, ethnicity) willing to continue these eventual new forms of transport after the reopening of the Danish society?

SAMPLE AND REPRESENTATION

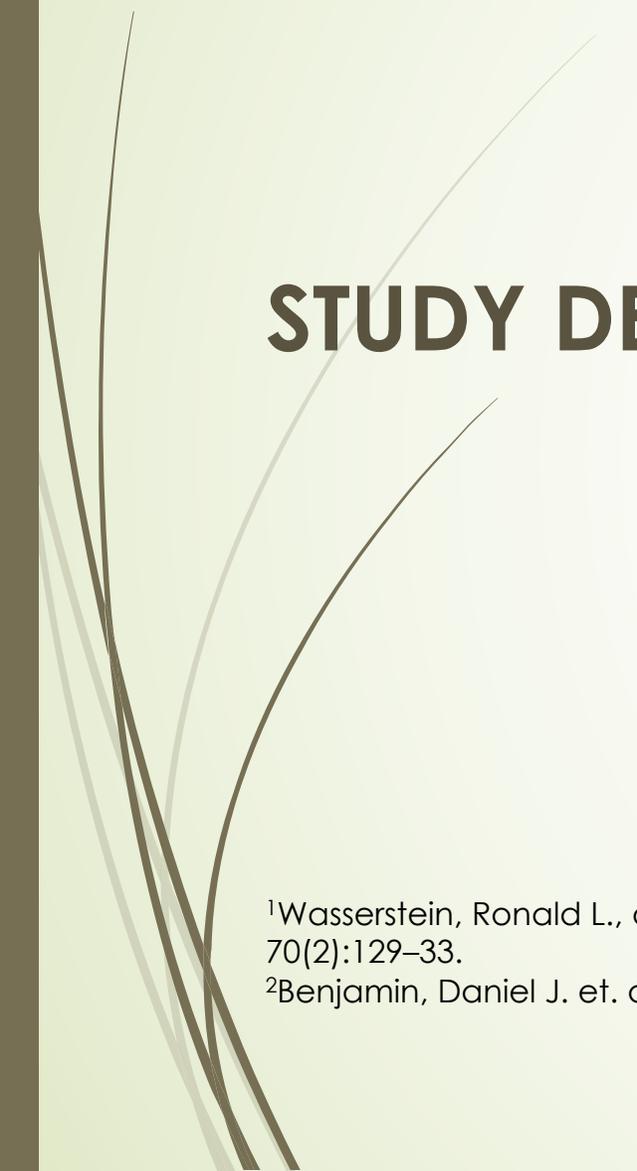
- ▶ Respondents (n=595) were recruited through
 - ▶ facebook campaign boosts
 - ▶ facebook local group pages
 - ▶ a range of municipalities' websites and facebook pages
- ▶ Relatively skewed sample
 - ▶ significantly more women (70 % women, 29 % men, 1 % other)
 - ▶ significantly longer educated persons
 - ▶ on average significant younger persons, especially 26-65 year olds are represented in the sample and in lesser degree the most young and old.

Sample represented in 68 municipalities





STUDY DESIGN



- ▶ We have used an explorative approach to data
- ▶ To account for false positives we use a 0.05 indication level and 0.005 significance level when testing correlation.^{1,2}
- ▶ Weights have been added on gender and education when documenting transport modes.

¹Wasserstein, Ronald L., og Nicole A. Lazar. 2016. "The ASA Statement on p -Values: Context, Process, and Purpose". *The American Statistician* 70(2):129–33.

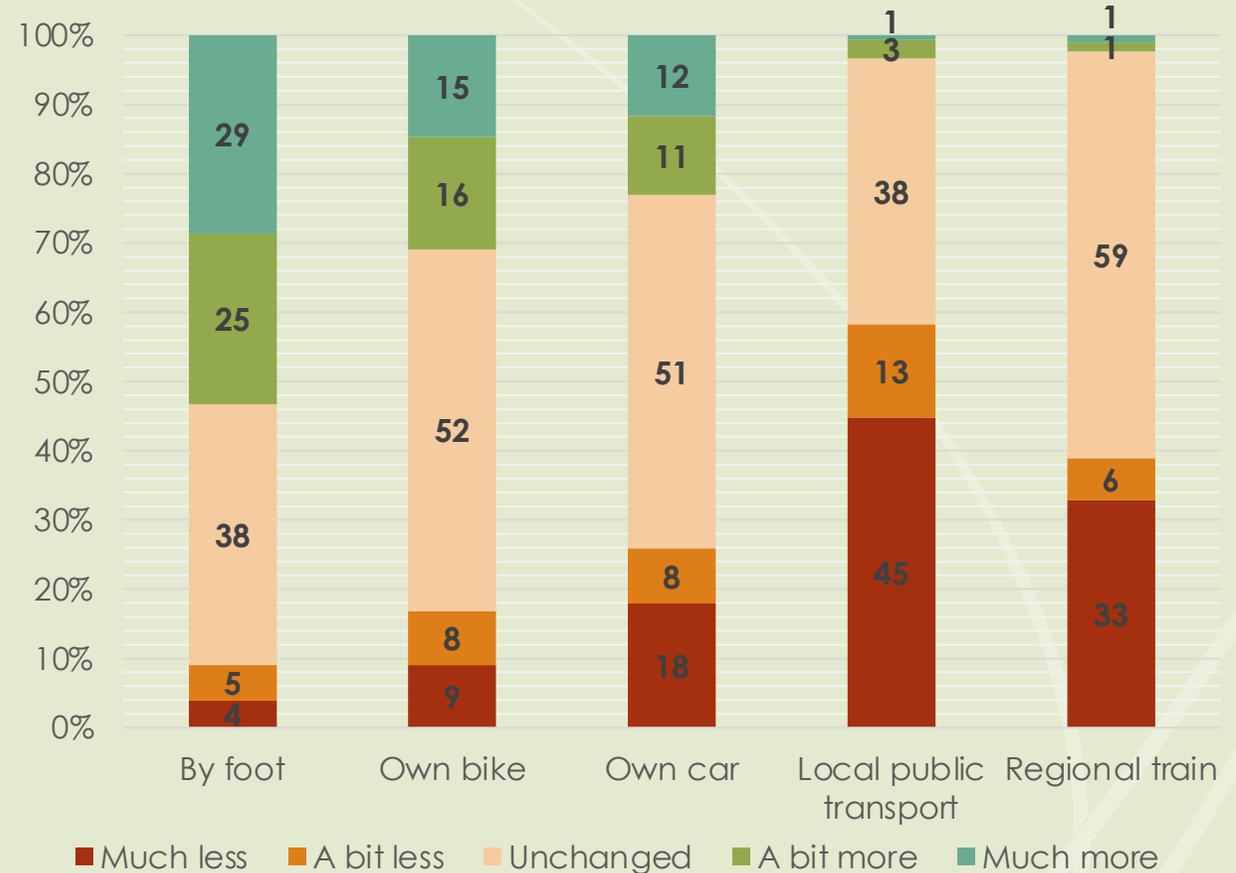
²Benjamin, Daniel J. et. al. 2018. "Redefine Statistical Significance." *Nature Human Behaviour* 2(1):6–10.

NON-MOTORIZED TRANSPORT MODES YIELD IN USE



- People have used non-motorized transport more during the Corona lockdown
- This makes room for change: 48 % of the persons that have walked a bit or much more, are willing to continue the new habit.
- The same goes for 72 % of the persons that have biked more during the Corona lockdown
- A challenge is to make collective transport a desirable choice again once the Corona virus is not a risk anymore.

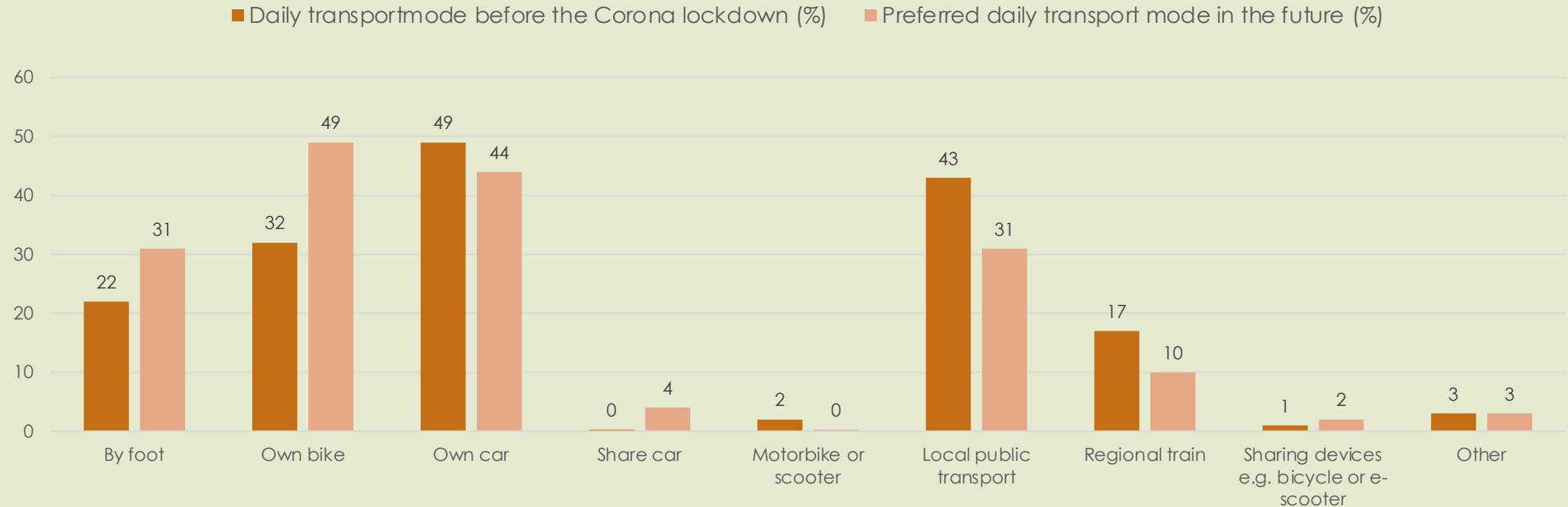
Reported Transport Modes During the Corona Lockdown



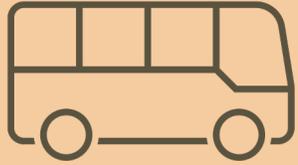
Note: *Weights corresponding to the share of sex and education in the population, **respondents: by foot (496), own bike (404), own car (344), local public transport (382), regional train (282), ***the response category "not relevant" has been coded as missing.

Danes prefer to travel more by bike and less by local public transport

Daily transport mode: Before the Corona lockdown and preferred in future



Note: * Weights corresponding to the share of sex and education in the population, **the respondents could choose maximum two from nine categories, and the answers do not therefore correspond with the total number of respondents, ***total respondents in daily transport before the Corona lockdown (864), and preferred transport mode in the future (898).



PUBLIC TRANSPORT DURING THE CORONA LOCKDOWN



➤ LIVING AREA

➤ ETHNICITY

➤ GENDER

➤ EDUCATION



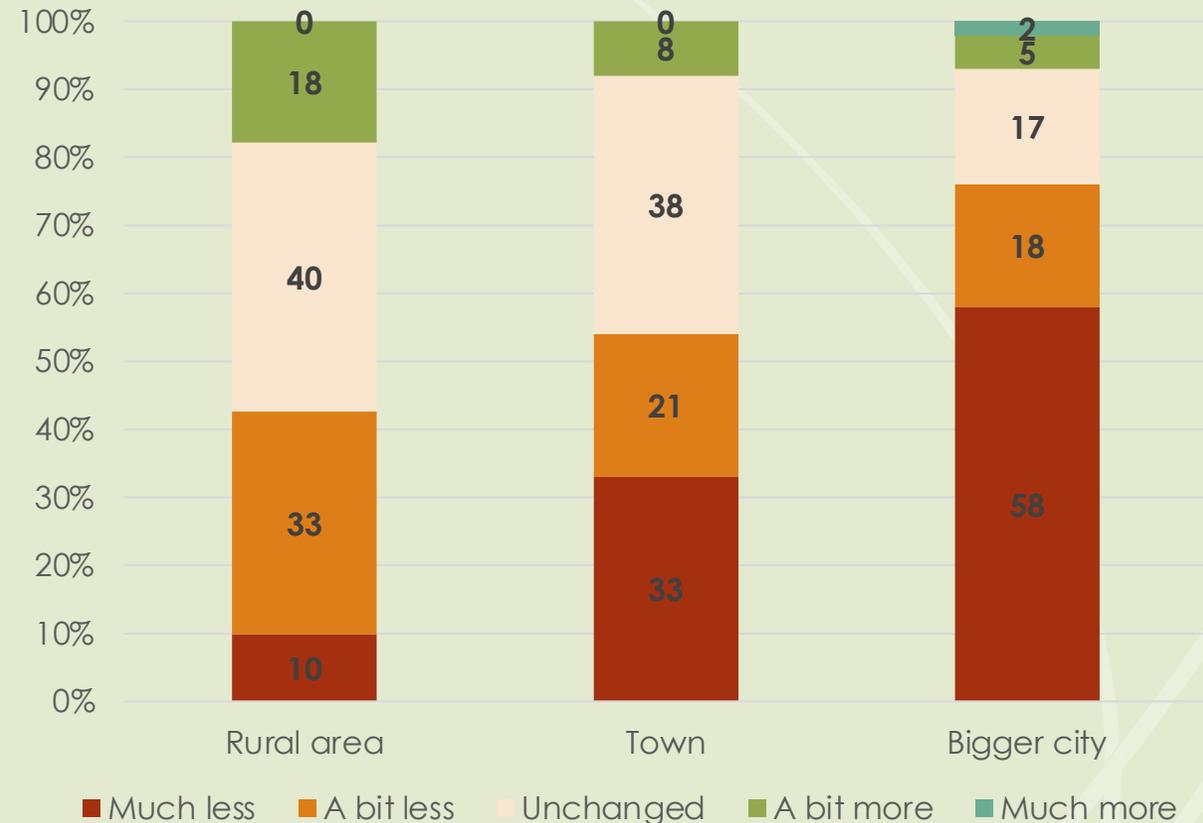
LIVING AREA



We see an indicative difference in the changed use of local public transport on living area

❖ The p-value is too high, and more data on rural area is needed

Use of Local Public Transport During the Corona Lockdown



Note: *Weights corresponding to the share of sex and education in the population, ** respondents: rural area (21), town (102), bigger city (258) ***the response category "not relevant" has been coded as missing, ****A chi²-test (critical value: 19.089) shows an indicative, but not significant difference in living area on the change of use in local public transport, *****p-value 0.014.

GENDER AND TRANSPORT

This survey does not indicate that the Corona lockdown have made transport frequency and mode more unequal between men and women.

- No difference among men and women in choice of the two most used transport modes before the Corona lockdown or in their preferred future transport mode.
- No difference in how often men and women travelled to work or studies before the Corona lockdown, or whether they travel more or less to work or studies during the Corona lockdown.





ORIGIN AND TRANSPORT

No reported differences in transport modes between persons with one or both parents not born in Denmark – more data is needed on preferred future transport

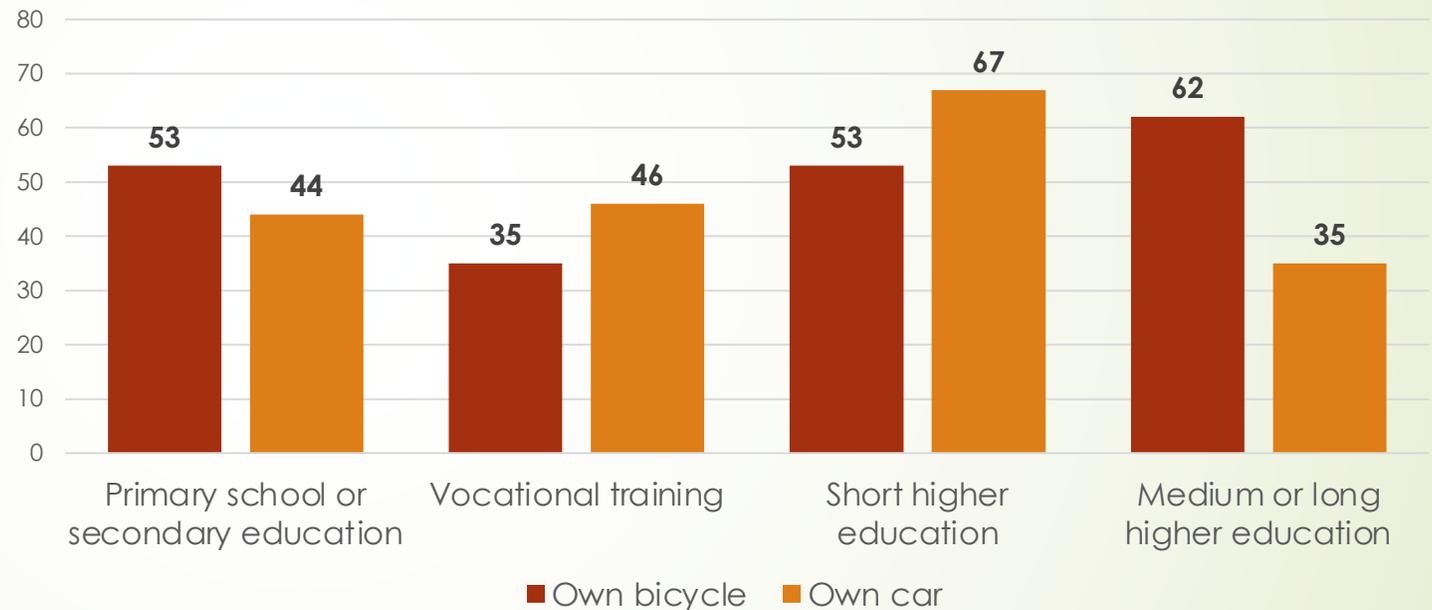
- ▶ No differences in the most used transport modes before the Corona lockdown
- ▶ No indicative or significant differences in the changed use of public transport during the Corona lockdown
- ▶ We see an indicative difference that persons with at least one parent not born in Denmark is more likely to prefer local public transport such as busses, metro or s-trains in the future. No conclusion can though be made because of too high p-value (0,0244). More data is needed on the subject.

EDUCATION

Future preferred transport mode

- ❖ Vocational trained are more reluctant to choose bike as a preferred future transport mode.
- ❖ Persons with shorter higher education are especially happy to travel by own car

Transport mode, one would prefer to make use of in the future (%)



Note: *the respondents could choose maximum two from nine categories, and the answers do not therefore correspond with the total number of respondents, **respondents who chose the category "own bike" (302) or "own car" (200), ***a chi²-test (critical value own bicycle (13,554) and own car (13,028)) showed a significant difference in education in the preference of use of own car or own bike, ****p-value respectively 0.004 and 0.005.



INTERSECTIONS - WHERE TO LOOK NEXT

- ▶ We know from earlier surveys that there are gendered differences. Need for intersectional research
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