Gender and (smart) mobility
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Abstrakt
Transport og mobilitet er modsat, hvad de fleste tror ikke kønsneutrale. Forskning og data viser, at mænd og kvinder har forskellige transportmønstre, anvender forskellige transportmidler samt har forskellige associationer og bekymringer forbundet med forskellige transportmidler.

I Rambøll udgav vi i marts 2021 en rapport om emnet, hvor vi præsenterer et overblik over den eksisterende forskning, bringer interviews med 11 ekspert i køn og mobilitet fra 7 lande, heriblandt Danmark, har indsamlet eksisterende kønsopdelte data for brug af gang, cykling, bil, forskellige typer af kollektiv transport samt en lang række nyere mobilitetstyper. Dertil kommer resultater fra en stor spørgeskemaundersøgelse blandt 3500 mænd og kvinder i 7 hovedstæder, heriblandt København samt resultaterne af fokusgruppeinterviews med 40 kvinder i de 7 hovedstæder.

På Trafikdage vil vi gerne præsentere udvalgte data med særlig fokus på de danske resultater – som bl.a. viser, at kvinder i højere grad end mænd transporterer sig bæredygtigt – går, cykler og kører med kollektiv transport. At kvinder i langt højere grad end mænd er bekymrede for COVID19 i kollektiv transport, og at kvinder i langt højere grad end mænd tænker over rutevalg og transportmiddel ved transport om aftenen og har udviklet en lang række strategier for at håndtere bekymringer i forhold til at færdes til fods og med kollektiv transport om aftenen. Sidst med ikke mindst viser resultaterne også, at kvinder digitalisering af mobilitet opleves som meget positivt af kvinder – det gør det nemmere at komme rundt og optimere tiden.

Nedanstående resume er et udsnit fra rapportens “Executive summary”, men oplægget vil være på dansk (kan være på engelsk, hvis det ønskes).

Why gender differences in transport and mobility matter
In 1997 the United Nations Economic and Social Council (ECOSOC) endorsed “Gender mainstreaming” as a critical and strategic approach for achieving gender equality. The concept of Gender Mainstreaming is defined as follows: “Mainstreaming a gender perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in all areas and at all levels. It is a strategy for making women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and societal spheres so that women and men benefit equally, and inequality is not perpetuated. The
ultimate goal is to achieve gender equality.” Research show that when gender is not explicitly part of the planning process, the solutions are most likely to primarily benefit men. Whereas the explicit consideration of gender throughout the process of planning, design, implementation, monitoring, and evaluation is more likely to create more gender equal solutions. Low representation of women among both decisionmakers, researchers, planners, engineers and designers in many sectors such as science, medicine, engineering and technology, combined with unconscious bias towards the average male are some of the reasons why gender-neutral and “planning for all” benefit men more than women.

Transport and mobility are not gender neutral. International Transport Forum has concluded that “gender is one of the most robust determinants of transport choice”. Still, gender mainstreaming is not systematically included in transport and mobility planning and projects. In addition, gender segregated data on travel behavior, trips, needs and concerns in mobility is either not collected or not analyzed systematically. This creates an unconscious bias towards men in transport and mobility planning and design. So how does this manifest itself – and what does it mean for everyday life?

The existing international research shows that women walk and use public transport (especially busses) more than men. Men drive cars, cycle, and use new mobility services like carsharing, ridesharing, bike sharing and e-scooters more than women. However, when cycling infrastructure is safe and coherent, we see that women and men cycle equally as much. Men are also more likely to have a driver’s license and have access to a car than women, while women are more likely to be a passenger than to drive themselves. Men and women have different trip patterns. Women’s participation in the labour market is lower than men’s and women oversee 75% of the unpaid care work in the world. This means women are more likely to trip chain making several, shorter trips while carrying groceries and/or accompanying children or older family members. Men’s trips are more likely to be individual trips commuting to and from work. The male trip pattern has shaped our transport policies and transport systems. This means our transport networks and systems do not serve women’s needs for multiple, shorter trips in off peak hours.

Fear of harassment and assaults also mean that women worry more than men about which routes to take and what time they travel. Additionally, transport pricing structures don’t always take trip-chaining into account. Public transport hubs and stations are not always designed for people traveling with kids, prams, strollers, and groceries or accompanying people with reduced mobility.

By increasingly gaining insights into gender differences in mobility, we hope to contribute to creating better and more equitable mobility for women, while at the same time making mobility better and easier for everybody as ‘women-friendly’ designs and solutions also work for men traveling with kids, groceries, accompanying family members, etc.

**Gender differences in transport and mobility**

International research, the expert interviews and the collected existing data in Finland, Norway, Sweden, Denmark, Germany, India and Singapore show that there are gender differences in mode choice and that these are linked to a number of structural gender inequalities in society – gender power gap, gender work participation gap, gender pay gap, unpaid care work gap and parental leave gap.

Historical, cultural, and commercial definitions of the roles of women and men influences our reasons for traveling and how we prefer are required to travel in our daily lives. But these structural differences not only influence modal choice and trip purposes it has also influenced the design of our transport systems. We have prioritized individual commuting in peak hours and to a great extent failed to include other needs in planning and design.

**Walking**

According to existing research, the experts we have consulted and the locally collected data women walk...
more than men. Walking is primarily used for grocery shopping, running household errands (other than groceries) and going to sport and other everyday leisure activities.

The gender distribution for the different trip types for walking are quite equal – except for “Leisure trips in the evening – going out to dinner, drink, theatre, cinema in the evening etc.” where more men than women indicate that as trip purpose for walking.

More women than men associate walking with “Active” and more men than women associate walking with “Slow”. In December 2020 when the survey was conducted, women to a greater extent than men also associate walking with being Corona safe.

With regard challenges and concerns, women to a greater extent than men point to traveling with groceries and bags and concern for personal safety (harassment, assault) as a challenge for walking. Fear of harassment and assault when walking is one of the gender differences identified both in international research, by the local experts and by the women in our focus groups. When walking at night women in all the geographies share how they have different strategies to deal with their fear – from staying away from certain areas, not staying out too late, choosing shoes they can run in to carrying their keys in between their fingers in their pocket as a potential weapon.

Cycling
About two thirds of the people surveyed have access to a functional bicycle. But the numbers mask big local differences. According to our survey, Singapore has the lowest bike ownership with 39% for women and 49% for men, whereas Denmark has the highest with 87% for women and 83% for men. Globally when asked to rate themselves in terms of experience, men significantly more than women rate themselves higher. The number of people rating themselves as very experienced cyclists varies significantly across the seven capitals – from 10% for women and 26% of men in Oslo to 60% of women and 59% of men in Helsinki.

Cycling is primarily used for running household errands (other than groceries), going to sport and other everyday leisure activities and visiting friends and family locally.

As for associations to cycling, the global survey shows that more women than men associate cycling with being sustainable. In both Delhi and Singapore “Fun” is also top rated in relation to cycling. In Singapore it’s clear from the focus group interviews that cycling for women is a leisure and exercise activity whereas it’s for transportation in the Nordics.

The main challenges and concern identified in relation to cycling relates to “traffic safety”, which was identified by more women than men as a challenge.

This sense of ‘not feeling safe’ was identified in the international research, by the local experts and by the women in our focus groups. In Copenhagen where cycling is traffic safe women in the focus group interviews think of cycling as their “safe place” in relation to personal safety – they feel that they can out cycle any man on foot who would want to harm them. In both Oslo and Copenhagen women in the focus group interviews also identify fast “lycra guys” as a challenge as they cycle very fast. In India and Singapore, the lack of safe cycling infrastructure is identified as a barrier for cycling for transportation.

The market share of bike sharing schemes is still low, but data show that men use bike shares more than women. When asked how technology and digitization influence cycling, both women and men find it makes cycling easier.

Public transport
The international research as well as the local data collected, show that women use public transport
more than men. Across the different modes of public transport that we surveyed – bus, local train, tram/light rail and metro - the primary trip purposes were leisure trips in the city during the day – shopping, café, museums etc., visiting friends and family locally, leisure trips in the evening - going out to dinner, drink, theatre, cinema in the evening etc.

As for the challenges and concerns Corona safety, travel time and traveling with groceries and bags are identified globally as challenges and concerns related to public transport.

The survey not surprisingly given its timing, shows that Corona is top of mind when it comes to public transport. But what it also shows is that women significantly more than men identify and associate Corona with public transport. Since women use public transport more than men, this creates a real risk of growing inequalities as places open up and movement levels return in our cities.

How Corona will influence our travel and commuting habits only time will tell, but for public transport it is important to note that even though many people can and will be able to work from home to a greater extent than before Corona, many people cannot work from home. People in the service, hospitality, health and care sector cannot work from home and will still need access to public transport. The risk therefore is, as these sectors to a great extent employ women, the impact disproportionately effects women.

Women to a much greater extent than men identify personal safety and fear of harassment and assault as a concern in relation to public transport. In the focus group interviews, women from across geographies also expressed concerns and fears around waiting at bus stops and train stations. They said that fear of harassment and assault influence their travel behaviour – both in relation to the choice of mode and the time of day they traveled. Concerns were raised about both too few and too many people in these places, and also that the design of public space, stops, stations and platforms and whether there are staff available influences how secure they felt. It is clear that the inclusion of considerations around women’s fear of harassment and assault and the need to create public spaces and facilities where women feel secure when traveling alone is important. These considerations should be factored in and analysed more when developing new public transport facilities and improving the existing ones. When testing and developing autonomous public transport it’s important to factor in how public transport personnel can be give women a sense of security.

More women than men buy public transport tickets via apps and the majority of both women and men find that technology makes public transportation easier to use.

Cars
Both the international research, the experts we have interviewed, and our locally collected data show that men drive more than women. Men also to a greater extent than women hold a driver’s license and have access to a car. Women are more likely to be a passenger in a car than men. In our survey the use of a private car is primarily for leisure, weekend use, holiday trips out of the city, visiting friends and family locally, running household errands (other than groceries).

The survey shows that women to a greater extent than men think of the car as safe – both in relation to Corona and personal safety. Women and men identify parking, price and CO2 as challenges and concerns related to cars, but more women than men raised concerns that the car is not climate friendly. This also comes through in some of the focus groups where several women expressed that they did not feel comfortable driving in the city, or that their husband drive when they are both in the car. Several felt that the car takes up too much space in the city and is not sustainable.

When it comes to technology half of all women and men noted that technology makes both car driving easier and living without a car easier. The latter corresponds with women using digital services for public transport more than men, and to them driving less.
New mobility services
According to existing research, the experts we have consulted and the locally collected data men use new shared mobility services like bike sharing, e-scooters, carsharing and ridesharing more than women. In relation to e-scooters our survey shows that women and men both identify e-scooters as traffic unsafe. “Traffic unsafe” is the most associated word for both men and women across all geographies and the primary challenge and concern for both genders. Women to a greater extent than men identify it as a challenge and concern.

For carsharing, our survey shows that women and men identify carsharing as sustainable, but women to a greater extent than men. Price is also identified as a primary challenge and concern globally. In relation to ridesharing, Corona and sustainability are the primary associations. With regards to Corona the majority of women identified this as a concern. Significantly more women than men also identify personal safety as a challenge and concern related to ridesharing. This was also addressed in the focus group interviews, where the discussions focused on what was seen as more safe – private ridesharing or taxies – and how different providers and apps have incorporated women’s concern for personal safety into their solution (via sharing location, rating of driver etc.).

Digitalization and technology
According to our survey men and women use technology equally much – with the majority of women using it for public transport and men for new mobility solutions and route planning services related to car driving. An argument often heard in relation to this is that women adapt slower to technology than men. But this does not shine through in the results of either the survey or the focus groups. The women demonstrated that they loved how easy apps and travel planning maps and services make traveling and how it can help them “optimize” their time. They also identify how apps can help make new mobility services like ridesharing feel more personally secure. That women use shared services like carsharing, ride sharing and e-scooters less than men does not, therefore, seem to be because the services are digital but rather because the services does not fit their needs. For instance, when they are required to trip chain with groceries and bags, accompanying children or other family members, or where they have concerns related to either traffic safety or personal security. But it also seems that there is a significant potential for designing new services that cater for these needs – and thus at the same time cater for men with the same needs and concerns.

Sustainability
Women to a greater extent than men travel by sustainable modes and consider sustainability in relation to their modal choices. Creating a more sustainable, CO2-neutral, and green transport sector means making sure it is attractive for women to continue to be able to travel the way they do and making it more attractive for more men to change to more sustainable modes.

Gender differences in mobility