



Transport poverty and gendered inequalities: Evidence from expert interviews in Karachi

Sana Iqbal 

Karlsruhe Institute of Technology, Germany

ARTICLE INFO

Keywords:
Mobility justice
Transport poverty
Women
Vulnerable

ABSTRACT

This paper studies the perceptions of transport experts towards the state of transport and mobility barriers faced by women in the context of Karachi, Pakistan, a representative megacity in the global South. It is based on the data gathered by 'conversations with purpose' with eleven experts in the transport sector to understand their attitudes towards transport provision and operation. These experts were opportunistically identified based on their presence at transport-related public events in Karachi. It was found that poorly coordinated planning, a lack of effective governance structure and investment have allowed the growth of an almost unregulated and ungovernable informal transport sector in Karachi. Apart from these issues, most experts displayed a patriarchal mindset that manifested itself by demeaning women's importance and their contributions. Due to the lack of female representation, such views remained unchallenged, and the majority of the informants did not express a desire to integrate women into decision-making or consultation processes. It can thus be argued that improving women's mobility requires changing the mindset of transport planners, who consider women as mainly responsible for household tasks and therefore beneath their consideration. The paper also suggests some preliminary recommendations to address the issue of breaking away from gender stereotypes in the transport sector. The study contributes to wider academic studies on gender and transport geography and will feed into and shape governmental and non-governmental interventions and policies on public transport in third-world countries.

1. Introduction

This paper focuses on gaining an overview of transport operation and planning in Karachi through the theoretical framework of transport poverty. It does this by ascertaining perceptions and attitudes regarding the difficulties associated with transportation in Karachi through an analysis of eleven expert interviews conducted in 2018. The interviews were held with representatives of key transport bodies (e.g. local officials) and these will be referred to as 'experts' or (E). The experts were mainly from the fields of transportation or urban planning, but some were also social activists who were working on the agenda of mobility. Thus, the analysis aimed to explore how to embed the travel patterns/needs of women into policymaking and services for urban transport, and also investigate the participants' approaches to gender inclusivity.

1.1. Background

Pakistan is consistently ranked as the world's second-worst country when it comes to gender equality by the World Economic Forum (World

Economic Forum, 2018). This is manifested by a heavily male-dominated society, where men are key decision-makers in both public and private lives (Shah, 2015). Moreover, in the case of transport, there is zero representation of women in the transport sector in Karachi, one of the biggest cities of Pakistan, with an estimated 22 million people (Rajper, 2015). As a result, there appears to be a lack of requisite knowledge and practical guidance on how to develop gender-inclusive transport (Heraa, 2013), which causes failure to adopt a gender lens that can assist in the gender-inclusive review of transport projects. The gender disparities in the broader context also manifest within the transport sector. The construction of gender in Pakistani society, and particularly in the urban context of Karachi, manifests in pronounced gender imbalances in urban mobility, which reflect broader socio-cultural and structural inequalities. Public transport services are often poorly designed and stratified, with segregated compartments that allocate disproportionately limited space for women, contributing to mobility exclusion (Iqbal et al., 2020). These service deficiencies intersect with unsafe and inadequately maintained urban infrastructure — such as sidewalks that are frequently encroached upon and subject to use

E-mail address: sana.iqbal@kit.edu.

as informal urination sites — undermining women's ability to navigate public spaces safely and comfortably (Panjwani, 2018). Furthermore, the absence of inclusive transport facilities during late evening hours exacerbates women's dependence on precarious or socially constrained modes of travel, reinforcing their marginalisation from public mobility and access to opportunities (Sajjad et al., 2018). Besides the lack of equal public facilities, the local attitudes towards gender, shaped by cultural narrow-mindedness, further aggravate the situation and add to the misery of this marginalised section. Being mired by cultural restrictions, women frequently require men's permission and company to enter public spaces since female travel behaviour is dependent on the socio-cultural, economic and built environment of the country (Iqbal, 2019: 10). Such patriarchal dispositions result in the marginalisation of women and contribute to inhibiting their rights. As a result, women's access to public transport in Pakistan is constrained, both by the cultural restrictions and the lack of access to a reliable, safe public transport network.

1.2. Background of public transport in Karachi

Karachi's public transport and urban policies remain shaped by colonial and post-colonial institutional legacies that structure mobility patterns and gendered access. British-era planning prioritized imperial infrastructure and segregated settlements, relegating indigenous populations to underserved areas, while post-independence institutions inherited these fragmented governance structures. These continuities have perpetuated weak coordination, political interference, and informal management practices in the transport sector (Jatoi & Zhang, 2025).

The city's transport system today is characterised by a mix of formal and informal modes. Formal public transport includes buses and minibuses regulated by the Regional Transport Authority, but these services have declined in coverage and quality over time. The resulting service gaps have been filled by informal paratransit modes, most notably Qingqi rickshaws and chingchi, which operate largely unregulated and are driven by profit maximisation rather than public service (Heraa, 2013). Qingqi and rickshaws are the informal, paratransit vehicles running on CNG (Noman et al., 2020). The ones found in Karachi are similar to those in South Asian and African cities, where they have gained popularity 'due to the lack of public transport and the inability of the masses to own private vehicles' (Sen, 2016). Hasan and Raza described a Qingqi as (2015: 8), 'a 70 CC motorcycle which has been converted to a vehicle carrying six persons' (Bilal, 2018). Recently, due to their popularity and demand, a nine-seater Qingqi has been introduced. Their affordability and easy availability make them especially useful for women (Sultana & Mateo-Babiano, 2017), with around 25% of women in Karachi using buses or Qingqi one to four times a week (Asian Development Bank, 2015: 14). Rickshaws are hired privately from the roadsides and can accommodate up to 3–5 passengers, depending on size (ibid:9) and are more open in design. Fares are arbitrarily decided (Brown & Mackie, 2017). Karachi has seen a sharp rise in motorbikes and rickshaws, driven by socio-economic shifts and the lack of reliable mass transit, including the delayed BRT and defunct Circular Railway (Amenaa & Baqueri, 2019). While these informal modes provide essential mobility, they often compromise safety, comfort, and accessibility, particularly for women and marginalised groups.

Gendered mobility patterns in Karachi are shaped by patriarchal social norms and institutional cultures that restrict women's movement and participation in public life. Women face significant barriers to safe and reliable transport, including harassment, a lack of representation in planning, and limited access to formal employment in the sector. Despite Pakistan's National Transport Policy being one of the most gender-inclusive in the region—explicitly calling for equitable access and gender-sensitive planning frameworks (Sil & Chowdhury, 2025)—implementation remains weak, with gender action plans rarely enforced at the city level. Despite this provision in policy, the female

representation in the transport sector remains very low. Thus, Karachi's transport landscape is a product of layered historical forces, where colonial-era spatial and institutional legacies intersect with contemporary governance challenges and gendered social norms, shaping both the possibilities and limitations of mobility for its diverse population.

2. Theoretical framework: importance and examples of indicators for implementing gender mainstreaming in transport

The existing literature emphasises the role of urban planning agencies and officials in not only providing efficient transport solutions but also recognising their key role in fostering social inclusion and gender equality. In this regard, a Gender Impact Assessment (GIA) is a popular tool for gender mainstreaming,¹ used by governments in many parts of the world (EIGE, 2016, p. 10). Assessing gender impact requires not only information about gender differences in the form of sex-disaggregated data but also an understanding of which differences constitute or have an impact on inequality and discrimination (EIGE, 2016). Therefore, the mechanisms that lead to inequality and discrimination, if understood, can then inform processes that promote gender equality. This requires a nuanced understanding of the long-term effects of the lack of gender-inclusive measures, for example, women's care responsibilities in urban planning, '...can make it easier for women to engage fully in the paid workforce... when we account for female socialisation in the design of our open spaces and public activities, we again save money in the long run by ensuring women's long-term mental and physical health' (Perez, 2019: 66).

Legislation and policies have tremendous potential in this respect, but an overall policy framework can be crucial in devising gender-inclusive solutions. The framework should be influenced by cultural considerations, and therefore, an understanding of context goes hand in hand with understanding the approach towards policymaking (Sutcliffe & Court, 2005). Thus, there is a need to outline existing policy frameworks as well as implementation mechanisms to investigate whether or not they focus on gendered transport poverty and how to integrate gender into transport policy dialogue.

2.1. Transport poverty

Transport has the potential to transform gender discrimination, too, but this is often untapped. Gender issues are often relegated to the 'soft sciences,' and the social science perspective has often been largely ignored in transport planning in Pakistan, leading to the simplification of a complex variety of social factors that are crucial to it. Around the world, there is now a growing concern for using gender analysis as a way to improve transport planning (Uteng and Cresswell, 2008). Access to transport is socially constructed, which requires going beyond the physical infrastructure of transport in order to see how gender norms define women's mobility patterns (Lucas, 2012). This necessitates assessing the impact of normative structures on the lives of women and not only on their access to safe transport. A possible way will be to assess their agency and control over making decisions regarding their personal autonomy, domestic economies and exercise of political autonomy.

Lucas et al. (2016) have redefined and broadened the theoretical concept of transport poverty through integrating the deprivations that lead to transport impoverishment. Thus, they conceptualised transport poverty to encompass not only a lack of physical and financial means but also social and spatial deprivations, which can greatly influence an individual's mobility. Lucas et al. (2016) identified four conditions that contribute to transport poverty, although the relationships between

¹ According to the World Bank (2010: 14), 'Gender mainstreaming in the transport sector means identifying and addressing gaps in gender equality that will impact sector policies as well as the design, planning, and provision of its infrastructure and services.'

these notions can vary according to space and time (2016: 4). For them, to be transport-impoverished means that a person is facing the following conditions while trying to carry out their daily activities (2016: 7):

1. Mobility poverty
2. Accessibility poverty
3. Transport Affordability
4. Disproportionate Exposure to Unsafe Transport Externalities.

We adopt transport poverty (Lucas et al., 2016) as the base framework, but extend it through gender mainstreaming tools (EIGE, 2016), intersectionality (Crenshaw, 1991), and mobility justice (Sheller, 2018). Operationally, this meant that while coding interviews for categories like accessibility poverty and affordability poverty, we specifically tracked when gendered experiences—such as harassment, lack of representation, or reliance on expensive alternatives—appeared, leading to the identification of ‘sex-based poverty’ as an additional dimension. This strengthened the analytical capacity of transport poverty to address gender inequalities.

3. Data collection

The interviews may be considered as conversations with purpose, a “controlled conversation,” tending towards the interests of the interviewer (Gray, 2009). Open-ended interview questions were preferred for the study since they can better understand respondents’ experiences by not restricting them to a pre-defined structure. This interview technique can also allow the discovery of more than [is] anticipated (Farrell, 2016). Such qualitative studies with experts or key informants are common across South Asia and have increasingly highlighted the complex socio-political dynamics shaping urban mobility, particularly in contexts of developing countries, where motorcycles and rickshaws dominate due to infrastructural deficits.

Several studies have employed expert interviews with transport sector decision-makers to examine the dynamics of policy formulation, institutional constraints, and governance challenges in South Asian contexts. For instance, Mitra and Sapre (2021) conducted interviews with urban transport planners and municipal officials in India to explore the institutional barriers to implementing sustainable mobility policies, highlighting tensions between political priorities and long-term planning. Similarly, Srinivasan and Rogers (2005) used interviews with transport professionals in Chennai to investigate how infrastructure investment decisions often reflect elite priorities, contributing to inequitable mobility outcomes. In Bangladesh, Ahmed and Dearden (2019) engaged government officials and transport engineers to assess the challenges of integrating climate resilience into transport planning, emphasising the role of limited technical capacity and fragmented institutional responsibilities. Research in Nepal has also relied on expert perspectives, such as the work of Shrestha and Ojha (2017), which examined the decision-making processes behind urban transport projects in Kathmandu, underscoring the influence of donor agencies and informal governance structures. Together, these studies demonstrate the value of expert interviews in uncovering the political, institutional, and socio-economic factors shaping transport policy and practice in South Asia.

The interviews aimed to gain an understanding of participant roles as well as to discuss initiatives in transport planning. Interviews were scheduled for 20–25 min, mostly in the offices of the experts. The questions were tailored according to the profile of each respondent, allowing them time to speak about the provision of transport and plans, and were based on three questions, which served as prompts for the discussion:

1. What is your role in the urban transport sector, and how does it relate to planning or implementing services that address the mobility needs of people in Karachi?

2. Could you elaborate on the effects of the current provision of transport in Karachi?
3. What has been done or can be done to make transport user-friendly?

Sampling and Recruitment:

As part of the fieldwork, the researcher attended relevant transport-related events and actively made contacts with transport stakeholders such as policymakers, NGOs, academic experts, field experts (drivers), urban planners and engineering professionals. As a result, five initial interviews were scheduled, which led to more recommendations using the snowball sampling approach. In total, 11 experts were interviewed (see Table 1).

Interviews were conducted with a small sample of experts who either worked in transport planning or were involved in the operational side. The purposive, key-informant sampling was intentionally used to generate in-depth, information-rich insights from senior decision-makers and sector experts. The interviews were conducted until thematic saturation (redundancy in key decision-level perspectives) was reached for the study’s aims.

Only one informant in our sample identifies as female (E6). The gender imbalance reflects the actual exclusion of women from decision-making. We treated this as a substantive finding in itself, triangulating with NGO reports and secondary data (Asian Development Bank, 2015) to guard against interpretive bias. The researcher avoided imposing the gender theme on the respondents and asked them only limited questions about making transport user-friendly, to let the respondents share and emphasise the points they considered to be important.

3.1. Approach to data analysis: operationalisation

The interviews were transcribed and coded using NVivo. Deductive codes were drawn from Lucas et al.’s (2016) four categories of transport poverty, while inductive coding surfaced. To avoid bias, we examined whether core themes persisted when (a) temporarily excluding E6’s data and (b) foregrounding E6’s accounts. The overarching thematic structure remained intact, and rather the differences emerged when comparing governmental vs non-governmental representatives, as discussed in the latter part of the paper.

The interviews were transcribed, and using the transport poverty themes outlined above, coded using NVIVO, with the codes verified by an independent researcher. This was made possible by involving another reviewer for the data analysis process since ‘analysis is verifiable if another researcher can take your data and arrive at similar findings’ (Krueger & Casey, 2015: 140). The reviewer, who had experience in human factors for designing, independently read the transcripts and performed coding, which helped to increase the validity of the emerging themes. Analysis was done in a way that at least two team members coded all the interviews. The general analysis aimed to code for forms of

Table 1
List of experts interviewed for the study.

Identifiers	Gender	Position
E1	M	A senior official from the Road Traffic Authority
E2	M	President of Karachi Transport Union/Association, working for transport workers
E3	M	Project Director of a new transit line under construction
E4	M	Founder of a local NGO working on improving urban infrastructure in the city in partnership with citizens and government agencies
E5	M	Senior Researcher at an NGO
E6	F	Social activist (NGO)
E7	M	Chief Consultant of the authority working on the mass transit project
E8	M	Dean at a local university
E9	M	Local bus driver
E10	M	Chief Engineer, involved with governmental projects
E11	M	Young architect and urban planner

transport poverty evidenced from the interviews, as well as the dynamics and factors influencing women in particular.

We further analysed the transport poverty-codes to identify patterns in the data, meaning using a combination of deductive and inductive coding. The sub-codes that emerged were then grouped into four established, analytically distinct categories (Lucas et al., 2016), and the remaining findings related to sex-based issues were categorised as sex-based poverty. This approach contrasted with the existing framework of Transport poverty, which did not include all of the findings. For example, a code emerged on the lack of drivers' accountability, which could be grouped with other codes relevant to mobility poverty issues. However, the lack of female representation emerged as a code, which was linked more closely to cultural and systemic issues related to the transport sector and therefore could not be assigned to any of the existing overarching themes. Thus, the five types of transport poverty identified emerged through an iterative coding. These codes were then defined as follows:

In order to agree on how to add this new form of transport poverty emerging from the data into our coding, we also followed an inter-coder procedure (independent coding by a second researcher, calculation of percentage agreement, and consensus meetings to resolve discrepancies). Sex-based transport poverty emerged from the findings as a critical dimension when the data were analysed through a decolonial and intersectional lens. A decolonial approach foregrounds how transport systems are historically shaped by Eurocentric models privileging male, middle-class, and car-owning users, marginalising those whose mobility practices diverge from these norms (Porter, 2016). Intersectional analysis further demonstrates that women's experiences of transport poverty are not homogenous but shaped by their positionality across axes such as socioeconomic status, ethnicity, and caregiving responsibilities (Crenshaw, 1991; Levy, 2013). For example, restrictive gender norms and safety concerns limit women's access to certain modes or times of travel, while structural inequalities in employment and income constrain their ability to afford reliable transport options (Lucas, 2019; Uteng, 2020). Recognising sex-based transport poverty through these combined analytical lenses therefore illuminates how mobility injustice is both produced and maintained within wider systems of social and spatial inequality, demanding context-sensitive and inclusive policy responses.

4. Results

As can be seen in Table 2, an additional theme of sex-based poverty emerged from the data, while the other categories had to be redefined and given more examples to fit the context of the study. This, along with the existing themes, will now be presented here:

4.1. Theme 1: mobility poverty

The main issues that emerged in this category were poor infrastructure, especially of public transport vehicles such as buses, and a lack of driver accountability.

4.1.1. Poor infrastructure

In terms of poor infrastructure, the respondents spoke of their dissatisfaction with the current transport provision and shared concerns related to the lack of buses and the demand-supply gap in transport. However, there was a conflict between the various representatives about the number of routes, buses, coaches, and rickshaws. Recent data shows that Motorcycles now constitute approximately 52% of the city's overall passenger transport, a figure that underscores their dominance in urban mobility (Amenaa & Baqueri, 2019). This rise is attributed to their affordability, low fuel consumption, and ease of manoeuvring through congested roads, making them an attractive alternative to the city's deteriorating public transport system (Hamza, 2018). Moreover, the ability to purchase motorcycles on instalment plans with minimal down

Table 2
Themes of transport poverty.

Themes/Parent codes of Transport Poverty	Description	Indicators or sub-codes
Mobility Poverty (MP)	Non-availability or poor design of motorised transport that is appropriate to the needs of an individual	Poor infrastructure, lack of drivers' accountability
Accessibility Poverty (AP)	The inability of the available transport to reach destinations that can accommodate the activity patterns of an individual to have a fair quality of life	Lack of route coverage, lack of integrated planning
Transport Affordability (TA)	Expenditure on the daily transport needs of the household that leaves them below the established poverty line	Changing fare costs, unwilling dependency on expensive modes of transport
Exposure to unsafe Transport Externalities (TE)	The travel conditions offered by the transport put an individual into unsafe, risky and unhealthy circumstances	Risk posed by traffic congestion, street crime, ineffective enforcement of traffic regulations, corruption and weak institutional capacity
Sex-based Poverty (SP)/ Freedom	Not having agency or freedom to be able to make one's mobility decisions	Cultural restrictions towards the use of certain modes of transport, sexual harassment, not being able to make one's decisions, lack of female representation

payments has made them accessible to low-income groups.

According to E1, a high-ranking government official who works under the Federal Transport Minister, the number of vehicles was: 2789 minibuses, 660 large buses, and an additional 2356 coaches, which shows that the combined figure is not >6000. However, the figures provided by E1 did not seem to coincide with those shared by a senior official in transport with responsibility for heading the day-to-day operation of public buses, E2, who stated that,

In Karachi, we have a total of 8,000 buses comprising 2,000 big buses, half of which work on contract for employers such as factory or bank workers. Apart from this, we have 3,000 coaches and 3,000 minibuses. We need at least 30,000 buses for Karachi.

There was a lack of consensus between E1, E2, and E3 when it came to quoting this crucial number. Moreover, for E3, the number of buses has increased over the years, while for E1 and E2, buses have substantially reduced in number, and their condition has also deteriorated. The most experienced expert, E2, who has been working in the transport sector for >30 years with the organisation and operational levels of public transport, shared that the transport has deteriorated and based on his experience, commented on the incompetence of the informal public transport system:

'Previously, the government used to allocate funds for public transport in each of its five-year plans, but then the government shifted the responsibility of transport to the private sector since the 1970s. At present, we are not being given any incentive from the government, and that is why we feel ignored. People assume that the transport industry is very easy money and is a profitable business, but in actuality, it requires much effort and is very tough.'

Thus, although initially the informal sector was endorsed by the government, with time it stopped supporting the transport sector, which was the biggest reason for its downfall, as echoed by E2:

I would like to share with you my favourite verse here, which I found written on the back of one of our buses

Na engine ki khoobi na kamal-e-driver

Chali jar hi hain khuda k sahary.

(It's neither the quality of the engine nor the skills of drivers, rather it's the blessing of God that the vehicle is still running.)

Not only are the vehicles in poor shape, but the administrative duties related to transport are also divided. Talking about the issue of poor coordination and mismanagement, the founder of a local NGO, E4, commented:

Separate bodies are working in Karachi for the construction of roads, authorising route permits, and planning for the new transport projects, which have affiliations with federal, provincial, and city-level governments, with no coordination between them. No surprise, then, the mess we are facing here.

This view was of relevance, as it was difficult to understand the roles of different authorities or name a single stakeholder for one area of responsibility. However, it was clear that this mismanagement led to an increase in the number of private vehicles in Karachi, which was mentioned by 40% of the experts, and they were especially concerned about the widespread use of motorbikes.

4.1.2. Lack of driver accountability

A critical dimension of transport governance emerging from the interviews concerns the absence of meaningful mechanisms to ensure driver accountability. Regulatory bodies were perceived as largely disengaged from monitoring everyday practices on the road. According to E1:

No rule can enforce that bus drivers should not ignore people. It's up to them, so if they want, they can take the passengers waiting for the bus, or they can stop the bus at a stop when requested.

Moreover, there is also a lack of reliable data about the annual prevalence of accidents and road casualties. E3 shared an official account of all the accidents that took place in 2018: approximately 384 accidents were reported by August. However, he felt that the numbers are under-reported:

'One NGO reported 32,000 accidents this year, while our estimates give a very small figure, which means that there's a huge difference between the accidents reported by the traffic police and those by the non-government body. However, since we are working at the governmental level, we need to follow the official data from the traffic police.'

As the data is underreported, this speaks to a lack of reliable official data that will inform future policies. The lack of driver accountability also manifests in issues of accessibility, as further elaborated by E6:

One cannot ask the drivers why they were late or hold them accountable since they are informal and private buses and in most cases have very little accountability towards the government bodies.

4.2. Theme 2: accessibility poverty

The main issues related to inaccessibility were the lack of integrated planning and the lack of route coverage.

4.2.1. Lack of integrated planning

The main issues that emerged in this category were the lack of integrated planning and the lack of route coverage. Looking at the lack of integrated planning, during the time of data collection, many debates were taking place regarding the planning and execution of new mass transit projects such as BRT. This was being criticised for its lack of sustainability, integration with other urban amenities such as housing, and its worsening of traffic problems for citizens (Ilyas, 2018). Some respondents raised concerns about the lack of a traffic management plan for the projects under development: for E7 (a senior official working on the mass transit project), there has been no model or master plan for the

city.

There is no transport model for Karachi. I have been working for two years now. Never have I seen a land-use plan for Karachi that we can integrate with BRT planning. There is no public transport in Karachi. There has never been any integration between land use and transport planning. Transport works like blood in your body; if blood is not circulated, your body is paralysed. Karachi is currently paralysed.

There was also discussion about the lack of integration between the six planned BRT lines: the Red, Yellow, Green, Orange, Purple and Aqua Lines.² Despite this, the government respondents suggested that the proposed BRT lines might resolve current transport problems. However, respondents working in NGOs were more critical of the BRT, reflecting upon the current tensions between different groups, as well as the ever-increasing population of the city. E4, the founder of a local NGO, was vocal about the inefficiency and segmented nature of the transport sector:

Now 6 BRT lines have been planned, but all these lines have different masters; every line has its own funder and operator, e.g., the Green Line is funded by the federal government, while the Sindh government is responsible for its operation, but it does not have any plan. There is also no attempt at intermodality, so you cannot expect them to be linked with the existing public and private modes of transport, which means that again, there are various limitations.

The future of transport did not appear promising, and the discussion with five of the experts (E4, E5, E6, E8, and E11) highlighted that new projects have confused and overlapping intentions, since it was planned and initiated without looking at the impact on the existing land use as well as an understanding of traffic management. E6, a social activist, shared similar concerns:

Now that we are listening to the news that on Bundar Road³ there will be three BRT lines, so where is the land? The city is already too congested. How will you facilitate all those people who come to work in the tertiary streets, houses, and internal locations? There is no inner-city loop service or feeder transport, and it's too much of a walk; we don't even have walkways.

Often, this lack of coordination between civic agencies could lead to corruption at different levels since it was difficult to maintain transparency and accountability. Two experts (E1 and E2) openly spoke about this and commented that corruption is so prevalent that the current bus operators often drive without licenses and are not held accountable for this. The issue of corruption will be discussed extensively in theme four.

4.2.2. Lack of route coverage

In relation to the lack of route coverage, the depleting number of buses in Karachi has resulted in a reduction in the number of routes and promoted the acceptance of poor-quality and unregulated vehicles. Being aware of the problem, other vehicles such as Qingqi started to gain popularity, and although the government initially considered putting objections on these unregulated transport providers, as reported by E1:

there are no buses to access many parts of the city, so if Qingqi wants to operate on those routes, why not?

A few respondents shared their concerns, anxieties, and fears about offering better route coverage via the new BRT system, which will make it more difficult for pedestrians to choose to walk and thus might have to depend on less active modes of transport. E6 echoed this:

² The details regarding all the lines can be found here: <http://karachibrt.pk/>

³ Bundar road or M.A. Jinnah Road is one of the historical and most populated roads in Karachi.

With BRT, which major hospitals or workplaces are you providing access to? Because the transport is going to run only on major routes, it will not be able to accommodate travel to these amenities.

It seemed that such questions were not addressed in the planning stages, and this might be the reason none of the experts involved with the planning and execution of BRT raised this concern.

4.3. Theme 3: transport affordability

4.3.1. Changing fare costs

This type of transport poverty is experienced when an increased expenditure on the daily transport needs of the household leaves it below the established poverty line. Although affordability issues related to transport are mostly faced by transport users, there were instances where the experts shared their views regarding transport fares, too. E2 (a senior official in transport with responsibility for heading the day-to-day operation of public buses) commented:

Previously, rickshaws had built-in meters, and this helped in keeping the payment system transparent. Now they (rickshaw drivers) charge as per their wish.

Another issue was with the increased fares as proposed in the new transport projects. It was evident that the new buses would be air-conditioned and of high quality. However, E10 commented:

Everything has a cost; we are offering better service and comfort, so automatically the fares will increase too.

Therefore, this increase in fares might lead to making transport unaffordable to even the existing users, let alone expecting other people to opt for public buses.

4.3.2. Unwilling dependence on expensive modes of transport

According to E6, the poor planning on the part of transport agencies has facilitated an unprecedented growth of private cars and motorcycles, which, although is a costly alternative, people often have little choice:

I have grown up in Karachi. I have lived my whole life here, and I can see that the need to own private vehicles has increased tremendously. With time, other countries and cities developed themselves in a way that people are not required to own private vehicles but here once people start earning, they want to arrange transport.

People were thus helpless to become dependent on such private modes of transport for their everyday journeys, although it can cost them much more.

4.4. Theme 4: exposure to unsafe transport externalities

Poor travel conditions offered by the transport can put an individual into unsafe, risky, and unhealthy circumstances. However, there were several other externalities of transport, including ineffective enforcement of traffic regulations, corruption and weak institutional capacity, as well as crime in the city, which can add to the risk. These factors are discussed in detail below:

4.4.1. Ineffective enforcement of traffic regulations

Due to the lack of integrated planning, there were no traffic management plans and very poor traffic regulation enforcement in the city. Lack of training for drivers, as well as non-functional traffic signals, were attributed to the lack of political will, as commented by E2:

Bus drivers act as the owners, and although they are not trained for driving, there is no regulation against them. Moreover, conductors are mostly their sons, and they also know that nobody can say anything to them. Even the Vehicle Fitness Ordinance has now become so flexible that they can get approval without even showing their vehicles.

On the other hand, E1 (responsible for giving route permits) said that the lack of sufficient transport is the main reason for not enforcing strict regulations against the poor maintenance of vehicles:

We know the condition of vehicles is bad, but we can't do anything. We cannot be strict since something is better than nothing. The Motor Vehicle Examiner is responsible for inspecting the condition of buses, but just like us, they are very lenient. This is because we know that there is no transport, so if we don't allow these poor buses to operate, then there won't be even one bus on our roads.

However, apart from blaming the policymakers and other authorities, citizens were also considered responsible for creating a mess on roads by not following the regulations, as E8 shared:

I think even people need to make wise choices, and be less selfish and lazy, such as avoiding traffic signals or parking cars at bus stops, as they usually do, which leads to traffic congestion issues. It's important to think about how others will access these places too.

E2 echoed this:

Most of the citizens are not law-abiding. Recently, a few green buses came on the roads, but people used to take out foam from the seats. During the 1960s, the Karachi Circular Railway was functional too, but people were not used to taking tickets and misused the facility. Without the rule of law, we cannot do anything. The same people when go to other countries, become very responsible because they have strict rules there.

Thus, there was a trend to link lawlessness with the cultural setup, which was considered the cause of the barrier to enforcing the traffic regulations. This trend was highlighted by E5 a representative of a local NGO, which was studying the behaviours of people regarding transport in Karachi:

We started our research by questioning why people sit on the roofs of the buses, knowing how unsafe it is. There were many unexpected reasons, such as being free from the conductor's annoyance. However, women cannot do the same, since our culture does not allow women to be exposed.

Thus, there is a need to look into the travel choices of people with a sociological lens to understand their needs and difficulties.

4.4.2. Corruption and weak institutional capacity

Corruption was an issue that affected transport at several levels. It appeared prevalent at the policy-making, institutional, and operational levels, as well as a norm among transport users. E11, A young urban planner commented:

I will be very blatant about the need for government officials to set aside their interests and think about people. When the Pakistan Peoples' Party was in power (2008), the railway minister had his own buses running in the city, so he was against the revival of the railway system so that his own business can gain profit. This is when your personal interests surpass the national ones.

Interviewee E9, a bus driver, provided a deeper insight into the reality of transport culture and corruption:

We have to give bribes to traffic police every week, since during the whole week we break many traffic laws, such as driving when the signal is red, taking passengers from the middle of the road and speeding. They do not ask directly for money, but can stop us anywhere and anytime, and we cannot argue as 'agr samandar me rehna ha to magarmuch se dosti krni hogni' (translation: If you are going to live in the river, you should make friends with the crocodile).

Corruption was thus letting these drivers display unsafe driving behaviours, risking the lives of innocent people.

4.4.3. Crime and violence in the city

E2 was vocal about the impact of violence in the city on the existing provision of transport:

Whenever there is a political or social conflict, buses were set to fire. This keeps on happening, and the state does not compensate us since maintaining law and order is the responsibility of the state. Political parties like MQM⁴ has burnt our vehicles and initially, 2.5 lakh buses were there, but now we are left with only a few thousand.

This trend shows that a poor law and order situation in the city has been impacting the provision of transport in Karachi. Moreover, it was also shared by E9, the bus driver, that due to the threats posed by violent incidents, they sometimes prefer not to take out buses on the roads in order to protect their vehicles.

4.5. Theme 5: sex-based poverty

As noted in Section 2, the data reveal recurring instances of stakeholder insensitivity and limited understanding regarding women's mobility needs. E10, who was employed in a technical capacity for an under-construction transport project, believed that there were more important issues that needed to be handled:

This gender element might come after 30–40 years and cannot be integrated with the current planning.

E1 and E7 also displayed a very narrow understanding of women's mobility needs by making claims that women's safety is ensured through legalising gender segregation inside the buses. E1 explained:

We don't grant the route permit to an owner if they don't have a partition between the male and female compartments, since it is mandatory as per the Motorway Ordinance.

Only three of the respondents (E3, E7, and E10) felt that some of the transport-related issues would be resolved with new BRT projects. Unfortunately, the new BRT system will retain the same gender segregation, with women getting the same proportion of total seats, i.e. 1/3rd as discussed by E7. However, E5, who was working as a senior researcher with a local NGO, was more supportive of gender equality. He linked this design problem with the socio-economic realm and agreed that there is a need to bring social change to empower women:

We have to understand that we had a feudal society that always fostered patriarchy. Although we have moved to a new economic system, the social aura has still not changed. So, we need to bring equality, and for that, we need to support women. This can be done by facilitating them in several ways, such as subsidising vehicles for women or guaranteeing women that they won't be harassed.

As the interviews progressed, conflicting perspectives between the various experts emerged, and a comparison between those affiliated with the government and those working privately or with non-governmental bodies proved useful. Thus, the interviews with experts revealed distinct attitudes toward dealing with sex-based issues such as harassment, which reinforced the differences between the approaches of governmental and non-governmental stakeholder representatives, as outlined in Table 3.

The gender pattern of social disadvantage was not recognised by the policymakers since most of the projects that are under development were planned without considering gender-inclusivity. Thus, there was a trend of justifying the current failure in understanding and incorporating women's voices by blaming women for not being persuasive and active in demanding their rights. Persistent patriarchal attitudes among

Table 3

Comparison of the responses shared by the government officials and the non-governmental representatives about issues related to sex-based poverty.

Themes related to sex-based poverty	Responses shared by the representatives from official or governmental representatives	Responses shared by the representatives from non-governmental bodies
Non-work journeys being considered purposeless/ cultural restrictions translated into transport provision	The proportion of seats on a bus and the partition between the genders should be the same. In my opinion, men have a lot of responsibility in the family, and somehow, women cannot perform so many tasks. Women, on the other hand, come out for less important tasks as the nature of their work is mostly related to the household. (E2)	Women face extreme issues with transport in Karachi, although everyone is facing issues. Women, children, and the elderly cannot access the walkways as they are too high. But our bus designs are very old; it's from the time of 1950 (2/3rd. for men and 1/3rd ⁴ for women), which shows the orthodox mindset of the planners (E6)
Not being able to make one's decisions	Many girls get educated, but then they get married and waste those seats. Women don't work in most cases, and if they face harassment, they don't take a stand. I went to Paris once and there I saw a very young girl wearing heels on a train at 1am. This is impossible for our women since they are always scared. (E10)	Women's mobility imperatives define their jobs, not their credentials. When they are not able to find transport, they settle for underpaid jobs. (E5)
Lack of female representation	Women don't need anything in particular; what they need is needed by men too. Nothing additional (E10)	The thing is that women's participation in the public sphere has increased to such an extent that they cannot be ignored, and it does create pressure on our planners. You know time will keep progressing, and if someone thinks that they can send women home again, they are living in a fool's paradise, because women are not going to leave (E5)
Sexual harassment	Culture cannot be changed overnight. We are working on the technology. Even in these new buses, it will be impossible to eliminate harassment. However, guards will be there to a lookout. Cameras will also be installed to make sure we record the journeys. But most women have problems if we take pictures (E10).	The use of transport is heavily gendered, and even the new system will retain the same gender inequality. Therefore, sexual harassment is still going to happen (E6)

institutional actors, who often deem women's mobility secondary, manifested in insensitivity to sexual harassment and the devaluation of women's journeys. Thus, overall, E2 and E10 displayed a complete disregard for them, while E5 and E6 openly spoke about the mobility-related issues faced by women in Karachi.

5. Discussion

Public transport accounts for a very small percentage of the total number of registered vehicles, <5% in Karachi (Hasan & Raza, 2015: 8). Although there is demonstrably an acute shortage of buses, there were conflicting figures provided by different experts and none of those

⁴ 'Muttahida Qaumi Movement or MQM (party representing migrants) as it is popularly known, is credited for introducing systematic violence and crime to the city's politics' (Hussain & Shelley, 2016:7)

matched with each other. Fortunately, there was a consensus regarding the condition of these buses, and it was commonly agreed by all respondents that the design and structure were extremely outdated. However, this was typically attributed to different reasons. The transport operators, led by E2, blamed the government for not subsidising transport. His viewpoint emphasises the need to recognise how difficult it is to operate transport, especially public buses, without the government's support.

To fill the gap in public transport, the informal sector came forward. Each bus is individually owned, and these owners/operators run a poor-quality, deregulated service that fails to accommodate the needs of this megacity (Heraa, 2013). Not only is the condition of buses questionable, but also informal paratransit vehicles, such as Qingqi, can also be considered a safety hazard due to structural flaws. Although the informal nature of these vehicles (without route permits) was initially subjected to immense scrutiny by the road traffic authorities, due to the demand-supply gap in transport, they have not been banned so far. The representatives of Qingqi Association have been vocal about the damaging impact of banning Qingqi on the lives of women, in the absence of an alternative mode of transport, since they cannot ride motorcycles (URC, 2015). It has been estimated that many women will lose their jobs with a ban on Qingqis, which have proved to be particularly viable for them.

An integrated approach to transport can take into account the wider land-use planning issues (Te Brömmelstroet & Bertolini, 2010). However, in the case of Karachi, it does not seem to be the case since transport is not integrated with other urban sectors, as narrated by E4 and E7, representing both the non-governmental and governmental organisations. Besides the lack of integrated planning, there was also the lack of coordination between the civic agencies who were deployed to work on improving transport in the city. Many of the experts who were interviewed expressed dissatisfaction with how all the agencies tend to work in silos. This lack of coordination and integrated planning was largely attributed by non-governmental representatives to the departments' limited capacity to align initiatives across levels and consolidate services on a single platform, while some also pointed to institutional corruption as a contributing factor.

Declining accessibility was also evident, as previously, the buses covered 329 official bus routes in the city, but currently, only 111 are being operated, while the others have been abandoned because they are not considered lucrative by transporters (Rajper, 2015). However, none of the government officials mentioned increasing the spatial or temporal coverage of current buses, nor was there an indication of how the new transit would integrate the existing transport infrastructure, which was questioned extensively by E6.

It was clear from the interviews that the new transit system will substantially increase the fares, as indicated by E10. Although E2 claimed that the government has put restrictions on bus fares, according to the existing research, there is a constant increase in them, too (Heraa, 2013:26), which first increased to Rs. 30 and now recently to Rs. 45 (PPI, 2019), as reported by a local newspaper. Thus, not only was the new transit system going to cost more, as shared by E10, but even the same poorly operated buses were also continuously increasing their fares without any improvement in the service. This insight proves the fact that transport operators might be making false claims to justify their mismanagement. Moreover, there are no set fares for rickshaws based on the travel distance, as mentioned by E2, which means that fares are decided arbitrarily.

Poor administration of transport and its informal nature were also characterised by corruption since it easily enables people to manipulate the already malfunctioning system. Thus, corruption could easily flourish in such an environment, especially in the context of developing economies, where the institutions were not keen on establishing a coherent system (Mishra & Ray, 2010). Due to the informal and chaotic nature of transport, it was important for the drivers to establish good relations with traffic regulatory personnel. Bribes are paid to the police

by these drivers to allow them to break traffic rules. Thus, 'police corruption' supports the violation of traffic rules and regulations, which then leads to traffic jams and inconvenience to commuters (Hasan & Raza, 2015: 36). However, much less scholarship has been devoted to the study of the impact of this corruption on urban transport. A ripple effect of this corruption is that drivers often operate with impunity, aware that they are unlikely to face accountability for their actions.

As a result, public buses are knowingly more likely to display numerous unsafe behaviours, including 'intimidating, cutting off or racing with vehicles; not stopping completely or stopping without a bus stop in sight and double parking at bus stops in the presence of traffic police than in their absence' (Mirza et al., 1999: 331). However, in many cases, road accidents are either not reported or are hidden from the records to safeguard the drivers from any charges (Aziz, 2015). Such incidents are becoming commonplace now (Mirza et al., 1999), and a closer reading of the expert interviews displays the lack of transparency and accountability in the current system.

The safety of road users is not prioritised, and everyday life in Karachi is instilled with street crime; so much so that pickpocketing and mobile snatching are now considered commonplace (Hussain & Shelley, 2016). For Zamir and Masood (2017), there is a close link between crime and the urban environment of the city since road geometry and design flaws at a few locations, such as flaws in road segments, have contributed to negative social behaviour (2017:624), explaining why the crime rate is higher at specific locations and hours in the city as compared to others. A Women's Safety Audit identified street crime — including snatching of purses and mobile phones — as a major risk in public spaces, noting that women, girls, and other vulnerable groups are often perceived as easy targets for such offences (UN Women, 2020).

All of the findings discussed in this section indicate that the transport poverty concepts outlined by Lucas et al. (2016). Lucas et al. (2016) overlook a critical dimension: sex-based disparities. Cultural norms restrict women's access to private vehicles, such as motorbikes, privileging men's mobility (Hadid, 2019). Consequently, women often face greater transport unaffordability, relying disproportionately on costlier modes like rickshaws. Similarly, the International Labour Organisation (ILO) states that only a fifth of women in Pakistan have 'paid jobs because of lack of transportation' while 'women workers spend almost half their salaries on transportation while their male colleagues spend only 5 per cent' (Shah, 2015).

Beyond higher travel costs, women face daily harassment on public transport (Heraa, 2013), highlighting the limited effectiveness of gender segregation, which remains the primary policy instrument for demonstrating commitment to gender mainstreaming. On the other hand, it has been recognised that simply offering gender segregation in buses will not help since such divisions work to patronise and undermine women's access to public space (World Bank, 2014). Such divisions fail to create an acceptance towards women's freedom of movement in other public spaces, too, where they will not have the same spatial segregation, which means that they will still be exposed to harassment.

Similarly, the use of video surveillance to address harassment, as noted by E10, reflects a limited understanding of women's issues. Stakeholders appeared to accept that women must exercise caution while using public transport. While nearly all experts acknowledged the prevalence of harassment, they tended to view it as culturally ingrained and thus largely intractable. Likewise, there have been no drastic efforts toward giving women equal treatment by allocating an equal number of seats as men. With only one female respondent, the gender imbalance in the transport sector is self-evident. However, there were also no efforts aimed at the capacity-building of women to promote their representation in the transport sector. Generally, there was an acute lack of awareness about the issues faced by women, which was evident from the dominance of men in all the decision-making positions. These findings are consistent with several studies that have shown a worldwide trend that 'men continue to predominate in decision making in the transport sector' (EIGE, 2016: 6). This trend not only reduces the employment

opportunities for women but also results in their needs not being reflected in the transport planning resulting into gender-exclusive provisions and also an attitude of blaming women for not reporting the cases of sexual harassment as done by E10.

This study has attempted to understand the perspectives of decision-making authorities about the transport problems in Karachi. The expert interviews provided critical entry points for understanding transport poverty and its impacts. Taken together, the interviews displayed significant differences between the opinions of official stakeholders versus those of those working in non-governmental organisations or institutions, which was facilitated by simultaneous data collection and analysis. A comparison of the opinions of these stakeholders is summarised in Table 4:

6. Conclusion and policy recommendations

Transport in Karachi is dominated by informal public-sector ownership of transportation, with public buses being owned by individual financiers. One side effect of the lack of this organised regulatory framework is that, in most cases, public transport staff and operators are untrained and use their personal links (or nepotism) to gain permits for bus routes. Another difficulty was that at the level of governmental offices, there was no clear division of roles and duties. Those who were not involved at the governmental levels highlighted the lack of political will towards improving transport in Karachi since the ambiguity of roles helps sustain corruption. Although this was understood from the early phases of research, when contacting different stakeholders, it became even more evident that different agencies working in different sections of transport had hostile relations with each other.

One advantage of the study is that the interviews were conducted in a period when there was a lot of discussion regarding future improvements related to transport. Thus, it provides evidence of how the different stakeholders viewed the same challenge. However, it also raises many questions for future work, such as why such senior officials are blaming women for the realities faced by them. One possible reason is that there are no gender mainstreaming plans or gender action plans in place to start integrating women into employment, decision-making bodies, or consultation processes, despite the policy. For most of the government representatives, it was more important to optimise infrastructure, which no doubt was needed, but doing so without understanding the social dimension of transport might not benefit all the citizens equally. This way of thinking stems from the lack of sensitivity towards women and manifests why gender issues have failed to be on their priority list in Karachi. Moreover, with not a single woman in the industry, such views remain unchallenged. Thus, the following policy recommendations can be made:

- There is a need for a governing body that can integrate the various levels of planning, operation and management of the transport system and bring the new initiatives in line with existing land use planning.
- Reliable data to show the impact of poor traffic regulations or poor governance, on the incidents of road accidents and crime is also needed.
- There is a need to conduct a gender impact assessment of current and future policies and practices, which must be a joint effort between public and private bodies. Some of the key efforts can be to create more acceptance for women's use of public spaces by making sure that the use of transport is not heavily gendered, and women can also benefit from heavily male-dominated motorbikes. Such initiatives can encourage female representation both in the transport industry and among transport users.

7. Limitations and future directions

The study faced several notable limitations that should be

Table 4

Summary of the results of expert interviews showing the themes and the corresponding responses.

Issues	Reasons shared by Government officials	Reasons shared by the representatives from non-governmental bodies
Corruption	Unavoidable due to the nature of the system, i.e. the lack of coordination	lack of coordination between responsible agencies
Crime/ urban violence	Powerful political groups	Poor urban planning leads to violence
Sex-based issues	Blaming women for their choices	Blaming the male-dominated society and transport planners
Accessibility issues	Historical negligence towards transport planning	Poor planning from transport planners, the segmented nature of transport
Affordability issues	Lack of government subsidies/ funds	Blaming the government officials for not focusing on the needs of the people
Poor urban infrastructure	Irresponsible citizens	Wrong priorities are set by the authorities
Poor enforcement of traffic regulations	Lack of accountability of transport operators	Police corruption
	Non-law-abiding citizens	Negligence displayed by people

acknowledged. First, the use of a small purposive sample of decision-makers restricts the breadth of perspectives captured, and the low representation of female informants further limits the inclusivity of gendered viewpoints. Additionally, the interviews conducted in 2018 may not reflect more recent developments or shifts in policy and public sentiment, potentially affecting the relevance of findings. The elite status of respondents also raises concerns about social desirability bias, where participants may have tailored their responses to align with perceived expectations. Lastly, the study's findings are context-specific and may not be generalizable beyond Karachi's decision-making landscape. To address these limitations, future research should consider user-centred studies to capture broader public perspectives, longitudinal follow-ups to track evolving trends, targeted interviews with female stakeholders to enhance gender representation, and comparative studies across different cities to assess the transferability of insights.

CRediT authorship contribution statement

Sana Iqbal: Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

Ahmed, S., & Dearden, P. (2019). Institutional challenges for integrating climate resilience into transport planning in Bangladesh. *Transport Policy*, 79, 103–112. <https://doi.org/10.1016/j.tranpol.2019.04.011>

Amenaas, S., & Baqueri, S. F. A. (2019). Extensive use of motorcycles in Karachi, Pakistan: Revisiting the policies that led us here. *Journal of Traffic and Transportation Management*, 1(2), 19–25.

Asian Development Bank. (2015). Policy Brief: A Safe Public Transportation Environment for Women and Girls. *Asian Development Bank, Manila*. ISBN-, 13, 9789292572891.

Aziz, S. (2015). *A leaf from history: Bushra Zaidi's killing and the riots in Karachi*. September 20. Dawn <https://www.dawn.com/news/1207836>.

Bilal, A. (2018) 'Qingqi rickshaw fare to increase, Sindh Cabinet approves', RS News, [online]. Available at: <https://www.researchsnipers.com/qingqi-rickshaw-fare-to-increase-sindh-cabinet-approves/> (Accessed: 4th March 2019).

Brown, A., & Mackie, P. (2017). *The informal economy and urban violence*. Karachi. Cardiff: Cardiff University.

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241–1299. <https://doi.org/10.2307/1229039>

European Institute for Gender Equality. (2016). *Gender in transport*. EIGE.

Farrell, S. (2016). *Open-ended vs. closed-ended questions in user research*. March 13. Nielsen Norman Group <https://www.nngroup.com/articles/open-ended-questions/>.

Gray, D. E. (2009). *Doing research in the real world* (2nd ed.). Sage.

Hadid, D. (2019). *Women who dare to bicycle in Pakistan*. February 3. NPR <https://www.npr.org/sections/goatsandsoda/2019/02/03/684438571/women-who-dare-to-bicycle-in-pakistan>.

Hamza, A. (2018). *7,500 new motorcycles hit roads daily in Pakistan*. February 6. Daily Times <https://dailytimes.com.pk/179824/7500-new-motorcycles-hit-roads-daily-pakistan>.

Hasan, A., & Raza, M. (2015). *Responding to the transport crisis in Karachi*. International Institute for Environment and Development (IIED Working Paper).

Heraa, N. (2013). *Transportation system of Karachi, Pakistan*. Ritsumeikan Asia Pacific University (Unpublished research report).

Hussain, N., & Shelley, L. (2016). Karachi: Organized crime in a key megacity. *Connections*, 15(3), 5–16.

Ilyas, F. (2018). *Environmental concerns raised over the \$220m red line brt project*. October 17. Dawn <https://www.dawn.com/news/1439461>.

Iqbal, S., Woodcock, A., & Osmond, J. (2020). The effects of gender transport poverty in Karachi. *Journal of Transport Geography*, 84, 1–9.

Iqbal, S. (2019). Mobility justice, phenomenology and gender: A case from Karachi. *Essays in Philosophy*, 20(2). IssArticle 4.

Jatoi, B., & Zhang, Y. (2025). Karachi as an urban centre of nationalism: Colonial urbanisation and political mobilisation (1913–1947). *Journal of Historical Urban Studies*, 16, 1–16.

Krueger, R. A., & Casey, M. A. (2015). *Focus groups: A practical guide for applied research* (5th ed.). SAGE.

Levy, C. (2013). Travel choice reframed: “deep distribution” and gender in urban transport. *Environment and Urbanisation*, 25(1), 47–63. <https://doi.org/10.1177/0956247813477810>

Lucas, K. (2012). Transport and social exclusion: Where are we now? *Transport Policy*, 20, 105–113. <https://doi.org/10.1016/j.tranpol.2012.01.013>

Lucas, K. (2019). A new evolution for transport-related social exclusion research. *Journal of Transport Geography*, 81, 102529. <https://doi.org/10.1016/j.jtrangeo.2019.102529>

Lucas, K., Mattioli, G., Verlinghieri, E., & Guzman, A. (2016). Transport poverty and its adverse social consequences. *Proceedings of the Institution of Civil Engineers – Transport*, 169(6), 353–365. <https://doi.org/10.1680/jtran.15.00073>

Mirza, S., Mirza, M., Chotani, H., & Luby, S. (1999). Risky behaviour of bus commuters and bus drivers in Karachi, Pakistan. *Accident Analysis & Prevention*, 31(4), 329–333. [https://doi.org/10.1016/S0001-4575\(98\)00025-6](https://doi.org/10.1016/S0001-4575(98)00025-6)

Mishra, A., & Ray, R. (2010). *Informality, corruption, and inequality (Bath economics research working paper no. 13/10)*. University of Bath.

Mitra, S., & Sapre, A. (2021). Institutional challenges in sustainable urban transport planning: Evidence from India. *Case Studies on Transport Policy*, 9(2), 739–747. <https://doi.org/10.1016/j.cstp.2021.03.010>

Norman, S. M., Ahmed, A., & Ali, M. S. (2020). Comparative analysis of public transport modes available in Karachi, Pakistan. *SN Applied Sciences*, 2, 967. <https://doi.org/10.1007/s42452-020-2780-7>

Panjwani, N. (2018). Mainstreaming gender in Karachi’s public transport policy. *European Journal of Sustainable Development*, 7(1), 355–364.

Perez, C.C. (2019). *Invisible women: Exposing data bias in a world designed for men*. Vintage.

Porter, G. (2016). Mobility, transport and development in Africa: Gendering the issues. *The Professional Geographer*, 68(2), 273–280. <https://doi.org/10.1080/00330124.2015.1065556>

PPI. (2019). *Transporters increase bus fares yet again without official notification*. July 17. The Express Tribune <https://tribune.com.pk/story/2014871/1-transporters-increase-bus-fares-yet-without-official-notification>.

Rajper, M. H. (2015). *Qingqi ban*. August 30. The Express Tribune <https://tribune.com.pk/story/948971/qingqi-ban/>.

Sajjad, et al. (2018). Overcoming barriers to women’s mobility: Improving women’s access to public transport in Pakistan. *GLMLIC Policy Brief No. 24*. Available at: <https://g2lm-lic.iza.org/publications/pb/pb24/>.

Sen, M. (2016). *The problems in public bus transportation systems: Assessment by passengers and transport authorities in Dhaka*. MPhil thesis. Trondheim: Department of Geography, Norwegian University of Science and Technology.

Shah, B. (2015). *Taken for a ride*. October 11. Newsweek Pakistan <http://newsweekpakistan.com/taken-for-a-ride>.

Sheller, M. (2018). *Mobility justice: The politics of movement in an age of extremes*. London: Verso.

Shrestha, B., & Ojha, R. (2017). Urban transport governance and decision-making in Kathmandu: An institutional analysis. *International Journal of Sustainable Transportation*, 11(8), 623–633. <https://doi.org/10.1080/15568318.2017.1292379>

Sil, A., & Chowdhury, S. (2025). Do they hear us? A practical framework for designing gender-inclusive transport policies in South and Southeast Asian countries. *Journal of Transport Geography*, 127, Article 103588. <https://doi.org/10.1016/j.jtrangeo.2025.103588>

Srinivasan, S., & Rogers, P. (2005). Travel behavior of low-income residents: Insights from interviews with transport professionals in Chennai. *Journal of Transport Geography*, 13(3), 265–274. <https://doi.org/10.1016/j.jtrangeo.2004.07.009>

Sultana, N., & Mateo-Babiano, I. (2017). Transport disadvantage and gender issues in South Asian countries: A systematic literature review. *Proceedings of the Eastern Asia Society for Transportation Studies, Ho Chi Minh City, Vietnam*.

Sutcliffe, S., & Court, J. (2005). *Evidence-based policymaking: What is it? How does it work? What relevance for developing countries?* Overseas Development Institute.

Te Brömmelstroet, M., & Bertolini, L. (2010). Integrating land use and transport knowledge in strategy-making. *Transport Policy*, 37(1), 85–104. <https://doi.org/10.1016/j.tranpol.2009.10.002>

UN Women (2020). Women’s safety audit: Karachi 2020. United Nations Entity for Gender Equality and the Empowerment of Women. Available at: <https://pakistan.unwomen.org/sites/default/files/Field%20Office%20ESEA/Docs/Publications/2021/03/Final%20Womens%20Safety%20Audit%20Report%202020.pdf>.

Urban Resource Centre. (2015). Women giving up jobs due to lack of conveyance claims Qingqi association. *Facts and Figures*, 23(8).

Uteng, T. P. (2020). Gendered mobilities and transport poverty. In T. P. Uteng, & K. Lucas (Eds.), *Urban mobilities in the global south* (pp. 61–76). Routledge.

Uteng, T. P., & Cresswell, T. (2008). *Gendered mobilities*. Ashgate.

World Bank. (2010). *Mainstreaming gender in road transport: Operational guidance for world bank staff*. World Bank (Transport Paper Series No. TP-28) <http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1227561426235/5611053-1229359963828/tp-28-Gender.pdf>.

World Bank. (2014). *Sexual harassment: The high cost of being a woman on a bus*. World Bank.

World Economic Forum. (2018). *The global gender gap report*. World Economic Forum. http://www3.weforum.org/docs/WEF_GGGR_2018.pdf.

Zamir, U. B., & Masood, H. (2017). Role of traffic network in monitoring crime and violence patterns in Karachi. *Journal of Basic & Applied Sciences*, 13, 622–625. <https://doi.org/10.6000/1927-5129.2017.13.104>

Further reading

United Nations, Chronicle.. Goal 11—Cities will play an important role in achieving the SDGs. UN Chronicle. <http://unchronicle.un.org/article/goal-11-cities-will-play-important-role-achieving-sdgs>.