

# UNDERSTANDING FAMILY MEMBERS PERSPECTIVE ABOUT WOMEN TRAVEL USING PUBLIC TRANSPORTATION IN LAHORE THROUGH STORY TELLING METHOD



Thesis Supervisor: Dr. AnneMarie Westendorp



Author: Iqra Rafiq

SEPTEMBER, 2021

**Key terms:** Family members 'perception, Public Transport, Women, Story telling

# **UNDERSTANDING FAMILY MEMBERS PERSPECTIVE ABOUT WOMEN TRAVEL USING PUBLIC TRANSPORTATION IN LAHORE THROUGH STORY TELLING METHOD**

A research project submitted to Van Hall Larenstein University of Applied Sciences in partial fulfilment of the requirements for the degree of master's in management of Development, specialization Rural Development, Social Inclusion, Gender and Youth

By Iqra Rafiq

September 2021

## ACKNOWLEDGEMENT

I want to express my gratitude the Almighty for providing me with good health and allowing me to study abroad. I am grateful to Nuffic for sponsoring my study in the Netherlands at Van Hall Larenstein University of Applied Science.

I'm thankful to Dr. Annemarie Westendorp for care and support throughout my studies. You provided me an invaluable supervision on my research out of your busy schedule. I'm also thankful to VHL staff to provide me a supportive environment to do master studies.

I'm also indebted to my friend Harrison Imugba for always giving me courage and motivation, without him, my research would not have been possible. I'm also grateful to my best friend Javeria Manzoor for your unwavering support during my study. I want to also extend my thanks to all participants of this study for entrusting me their feelings and experiences regarding public transport in Lahore city

Lastly, I'm also thankful to my grandmother (Nani) and parents especially my mother for their unconditional support, prayer, and love during my studies in abroad. I'm grateful to my brother and sisters for always being available whenever I needed, despite the 3-hour time difference.

## CONTENTS

|   |    |
|---|----|
| CHAPTER 1: INTRODUCTION .....   | 1  |
| 1.1 BACKGROUND .....  | 1  |
| 1.3 RESEARCH PROBLEM.....   | 3  |
| 1.4 RESEARCH OBJECTIVE .....  | 3  |
| 1.7 MAIN QUESTION .....   | 3  |
| 1.8 SUB-QUESTIONS.....  | 3  |
| CHAPTER 2: MAIN CONCEPTS OF THE RESEARCH AND CONCEPTUAL FRAMEWORK .....     | 4  |
| 2.1 PUBLIC TRANSPORTATION .....   | 4  |
| 2.2 PERCEPTION .....  | 4  |
| 2.3 REASONS OF STUDYING FAMILY MEMBERS PERSPECTIVE .....                    | 4  |
| 2.4 IMPORTANCE OF PERCEPTION IN PUBLIC TRANSPORTATION.....                  | 5  |
| 2.5 ACTIVITIES THAT ENCOURAGE WOMEN TO USE PUBLIC TRANSPORTATION.....       | 5  |
| 2.6 FACTORS THAT SUPPORT OR RESTRICT WOMEN’S TRAVEL BY FAMILY MEMBERS ..... | 6  |
| 2.6.1 FEASIBILITY .....   | 6  |
| 2.6.2 ACCESSIBILITY.....  | 6  |
| 2.6.3 SAFETY.....   | 6  |
| 2.6.4 COST .....  | 6  |
| 2.4 CONCEPTUAL FRAMEWORK.....   | 7  |
| CHAPTER 3: METHODOLOGY .....  | 9  |
| 3.1 RESEARCH DESIGN .....   | 9  |
| 3.2 STORING TELLING METHOD .....  | 9  |
| 3.3 DATA COLLECTION METHOD .....  | 10 |
| 3.3.1 SECONDARY DATA.....   | 10 |
| 3.3.2 PRIMARY DATA.....   | 11 |
| 3.3.4 SAMPLING STRATEGY.....  | 11 |
| 3.3.5 DATA ANALYSIS .....   | 11 |
| 3.4 ETHICAL CONSIDERATION .....   | 12 |
| 3.5     TIMELINE .....  | 12 |
| 3.6 RESEARCH CONTEXT .....  | 12 |
| 3.6.1 STUDY AREA .....  | 12 |
| 3.6.2 SIGNIFICANCE OF RESEARCH & PROBLEM OWNER .....                        | 13 |
| CHAPTER 4: FINDINGS.....  | 14 |
| 4.1 PROFILE OF RESPONDENTS .....  | 14 |

|                                 |  |    |
|---------------------------------|--|----|
| 4.2                             | FREQUENCY OF FAMILY MEMBERS USING PUBLIC TRANSPORT .....               | 16 |
| 6.2.                            | ACTIVITIES OF FAMILY MEMBER USING PUBLIC TRANSPORT .....               | 18 |
| 6.3                             | REASONS FROM FAMILY MEMBERS TO USE PUBLIC TRANSPORT BY THE WOMEN ..... | 19 |
| CHAPTER 5: DISCUSSION.....      |  | 28 |
| CHAPTER 6: CONCLUSION.....      |  | 32 |
| CHAPTER 7: RECOMMENDATIONS..... |  | 32 |
| REFERENCES.....                 |  | 34 |
| APPENDIX A.....                 |  | 37 |

## LIST OF FIGURES

|  |    |
|--|----|
| Figure 1: The conceptual framework for understanding the ways that family perception influence women's travel on public transportation ..... | 8  |
| Figure 2:Methodology of Conducting Story telling Research .....  | 10 |
| Figure 3:Timeline of the research thesis.....  | 12 |
| Figure 4:Location of city of Lahore in Pakistan .....  | 12 |
| Figure 5:Frequency of Using Public Transport among Mothers .....   | 17 |
| Figure 6:Frequency of Using Public Transport among Fathers.....  | 17 |
| Figure 7:Frequency of Using Public Transport among sons Figure 8:Frequency of Using Public Transport among daughters .....                   | 18 |

## LIST OF IMAGES

|   |    |
|---|----|
| Image 1:man escorting a woman on motor bike.....  | 18 |
| Image 2:Travel Modes in city .....  | 18 |
| Image 3:Both auto rickshaw (private) and Motorcycle rickshaw (public) drivers waiting outside the market..... | 21 |
| Image 4:Motorcycle Rickshaw and Bus .....   | 21 |
| Image 5:Bus stop occupied with rickshaws .....  | 25 |
| Image 6:Overcrowding on Metro Bus and its station .....   | 27 |

## LIST OF TABLES

|   |    |
|---|----|
| Table 1: Profile of Respodents from semi structure Interviews ..... | 14 |
|---|----|

## ABSTRACT

The aim of this paper is to understand the family members' perspective on women's use of public transport in Lahore, the second largest city in Pakistan. The proportion of men in Pakistan is almost equal, but women's contribution to public transport is not reflected equally and women have identified several problems in traveling by public transport. As Pakistan has a strong family structure, women's travel and other decisions are controlled by their family members. Previous studies have shown that focusing on the quality of services and transport infrastructure does not ensure that women can use public transport equally. Women's public transport needs are contextual and conventional methods are ineffective in addressing the complexity of this issue. The literature also suggests that involving family members is the optimal way to ensure women's safety on public transport. In this context, the storytelling method is used to explore the needs and issues of women on public transport from the perspective of family members. For this purpose, seven families were selected based on their economic status to understand the family members' perspectives and experiences concerning their women traveling on public transport. Based on the results of the family members' narratives, six themes were developed to better understand the common and prevalent difficulties for women on public transportation. It was found that both family members and women are very concerned about the cost, safety, accessibility, and convenience of public transportation. Cultural and social conventions also have a strong influence on women's use of public transportation. The findings of the study conclude with the fact that women using public transportation are contextualized, mentioned that women need special attention and show policy makers a way to address the problem of women's use of public transport.

## CHAPTER 1: INTRODUCTION

This study was conducted to find out the knowledge of family members about women travelling by public transport through storytelling method in the second largest city of Pakistan. According to Allen & Vanderschuren (2016), women's need for public transport is contextual and traditional research methods are not suitable to capture the complexity of this issue. Looking only at the quality of services and transport infrastructure is not enough to facilitate women's use of public transport (Asian Development Bank, 2014). Therefore, it is very important to develop a deeper understanding of women's needs and behaviours in public transport. In a country like Pakistan, where women are highly dependent on their family members, this study was conducted to explore the views of family members regarding women's travel to improve the understanding of women's needs and problems while travelling in public transport.

The report is divided into the following chapters: the first chapter describes the detailed background of the study area, the relevance of the study, the main research questions and sub-questions. The second chapter introduces relevant concepts to the research question based on previous research, such as perceptions, the role of family members' views on public transport, and the reasons that encourage or constrain women to use public transport by family members. The third chapter explains the methodology of the study, including the study area and the significance of the study. The fourth chapter presents the results of the narrative interviews with family members, and the fifth chapter provides an in-depth interpretation of the results through the triangulation method. The final chapter presents the conclusions and recommendations based on the relevant findings of the study.

### 1.1 BACKGROUND

The term 'gender' refers to the cultural mores and norms impart to the biological difference between sexes (Nallari & Griffith, 2011). In scientific studies, sex is used to define biological differences between human beings; and males and females are corresponding to two sexual categories (Kaminer, 2018). According to Norio (2008), society has fixed standards and rules to validate both masculine and feminine identities and all human beings are expected to conform to these individual roles and reproduce the conditions that perpetuate them. However, many policies around the world have been developed without considering the gender differences which has had negative impacts on the vulnerable members of society women or children (Adeel, et al., 2017).

The gender differences in both planning and transport sector have long been ignored (Granie, 2018). The transport has been overlooked the women's needs in public transportation because of considering equal demands from both genders (deMadariga, 2013). It is assumed that previous decisions were mostly taken by men based on their own experiences and interests and thus, they designed the facilities accordingly. These practices have worsened women's travel choices and perpetuated inequalities between men's and women's mobility in public transit.

According to Mejía-Dorantes & Villagrán (2020), mobility in transportation is described as an individual's ability to participate in activities that demand movement. Mobility is considered a human right with the belief that every citizen should have the opportunity to participate in social, cultural, economic, and political activities, and providing access to these activities is one way to achieve this,

which could be possible through a sustainable transportation system. However, ignoring gender differences in transportation have had a negative impact on women's travel which may jeopardize attaining sustainability in transport (Ceccato 2013).

Different researchers tend to have a different understanding of women's mobility. In this context, Adeel, et al., 2017 discovered that women's travel is contextual since it varies around the world. For instance, in African countries, women's travel is primarily concerned with the low-income situation. While in South Asia, it is influenced by social norms and culture, particularly for women, and the requirement of a man guardian for women's travel is unthinkable for the Western world (Muñoz Boudet, et al., 2013).

In South Asian Countries, women's travel is truly a sociological, complex, and dynamic issue (Gupte, 2015). This is because countries like Bangladesh, India, and Pakistan have a gendered view of 'honour'; with the concept of men owing inherent honour, but women possessing only shame<sup>1</sup> (Thynell, 2017). This gendered ideology leads to unfairness as men and women express honour in different ways which refers that women are the repository of shame and males regulate their conduct because shameless behaviour of women might bring the entire family into dishonour. Women are expected to maintain the honour, which requires them to be closely protected by men when they leave home, particularly their father, husband, brother, and son (Gupte, 2015).

In addition to that, countries particularly Pakistan and Bangladesh where they emphasize on a woman's "purity," and limited interaction with stranger particularly man. The reason is that men outside the family are considered as the "pollution" for women's honour and restricting unnecessary traveling by mothers and fathers to daughters or female's siblings is one method of maintaining their purity (Chen, 1995).

Furthermore, spending a lot of time outside their house is deemed against modest women's standard. For instance, a typical social norm in these countries is that bad girls go out a lot and bad wives spend a lot of time outside. In other words, it is believed that women who stay at home are considered modest and well-behaved and being at home is regarded as the safest place for them. Since women are exclusively responsible for taking care of their children and the idea that their character and values should be reflected in their children necessitates that women stay at home and have limited interactions with strangers. (Muñoz Boudet, et al., 2013).

In addition to above, patriarchal intention to limit women's travel is portrayed as a concern for their safety. According to Jayachandran (2021), in patriarchy culture guardian thinks that while traveling on public transport, their daughters, sisters or wives might expose to danger such as sexual harassment, rob, kidnap from interacting with man. Women particularly students and young employed frequently complain about staring, groping, catcalling at the bus stops or buses to family members resulting in limiting their travel options.

Guardianship has also a great influence on women's travel in Pakistan. Women are not permitted to leave the house without the guardian or spouse permission. Women mobility in Pakistan culture is linked to norms and safety concerns, and it is closely monitored by their family members such as male

---

<sup>1</sup> Honour is a public claim to value or value and a public acknowledgment of that claim whereas Shame is a concern for safeguarding and maintain one's worth, value, reputation (Jayachandran, 2021).



members or elder women to accompany them throughout the trip (Adeel, et al., 2017) It is evident from the real-life experience recounted by a researcher's colleague about visiting theme park:

*We, as a group of five women, were accompanied by two of our male family members on bus, and we were all standing in a line for tickets. One of the bystanders commented on my aunt's back that was slightly stained with ice cream. My uncle, who escorted us, was observing the scene. He stopped the bystander and slapped him, and the entire situation turned into a mass fight. Meanwhile, my uncle was accusing my aunt of not hiding the stain. As a result of the incident, we never took a bus again for traveling.*

The researcher's own travel experience while residing in Pakistan is as follows:

*Her father didn't allow her to travel on public transport going to work because of his views about mugging and harassment issues on public transit. Therefore, she never travelled on public transportation and spent half of her income on private transport to go for work which was safe and inclusive.*

### 1.3 RESEARCH PROBLEM

Pakistan has a very strong family culture and women have limited decision-making power and family members (either legal or blood bond) are the ones who have most influence over women's travel (Gupte, 2015). The socially constructed roles such as 'daughters', and sisters' make women highly dependent on their guardian, parents, or brother's decision to go out (Syed, et al., 2005). In case of wives, the travel decision is also influenced by a spouse or partners. Previous study has revealed that the family's decision influence women's travel in many cultures (Kerstetter, et al., 1996) however limited research has been undertaken in the urban areas of Pakistan to explore the different family members' perspectives on female issues on public transit travel (Malik, et al., 2020).

### 1.4 RESEARCH OBJECTIVE

The objective of this study is to uncover the family members' perspective towards women issues on public transportation in Lahore city through storytelling method. The more specific objective of the study is:

1. Identify the activities that encourage family members particularly women to use public transportation in Lahore city.
2. Determine the reasons that encourage or restrict women's travel on public transportation by the family members.
3. Develop knowledge and provide recommendations for the problem's owner to address women issues on the public transport.

### 1.7 MAIN QUESTION

What are family members perception about women travelling on public transportation?

### 1.8 SUB-QUESTIONS

1. How frequently do family members utilize public transportation?
2. What are the activities of family members using public transportation?

3. What are the views of family members on feasibility of public transportation for women's travel?
4. What are the views of family members on accessibility of public transportation for women's travel?
5. What are the views of family members on safety of public transportation for women's travel?
6. What are the views of family members on cost of public transportation for women's travel?

## CHAPTER 2: KEY CONCEPTS OF THE RESEARCH AND CONCEPTUAL FRAMEWORK

This chapter provides insight into the factors from previous studies that influence the perspective of family members about female traveling on public transportation; it explains relevant concepts related to the research question and operationalisation as well.

### 2.1 PUBLIC TRANSPORTATION

According to Merriam Webster dictionary, public transport is a system of trains, buses and other vehicles paid for or operated by the government. Lindsay & Lamprey (2019) define a transit system as a variety of transportation such as buses, light rail, and subways to improve accessibility for those who are unable to drive a car. This includes those who do not have access to personal vehicles, children, people with disabilities, the elderly, and especially women (Lindsay & Lamprey, 2019).

### 2.2 PERCEPTION

According to the Cambridge definition, perception is *a belief or opinion, often held by many people and based on how things seem*. Perception is defined by Schacter, Gilbert & Wegner (2011) *as the identification and interpretation of information, to represent and understand that information or its surrounding*. Perception can alternatively be defined as a person's basic cognitive contact with the world around him. It also refers to human mental action or the process of gaining knowledge through comprehension of thoughts, experiences, and senses (Efron, 1969).

All these definitions share some characteristics such as interpretation (Brispat, 2017), and how we interpret is determined by our **experience** or **view** or **opinion**.

### 2.3 REASONS OF STUDYING FAMILY MEMBERS PERSPECTIVE

There is a significant gender divide in the community when it comes to women using public transit. Since both men and women have different needs and approach to use public transportation and gender discrimination starts from the family, Rama (2018) presented a perspective to examine women's transport limitations. He proposed that women's mobility be studied at the micro level to develop gender-sensitive transportation policies and interventions.

According to the Barles-Arizon, et al., (2013), the family provides various functions for society in an ideal world. It socializes children, offers practical and emotional support for its members, and provides them social identity. Nevertheless, the family leads to societal inequalities for a variety of reasons and it may expose its member to violence, disagreement, and other forms of conflicts (Barlés-Arízón, et al., 2013). Major issues in the society arise as a result of different understandings, assumptions, and

expectations of a family members from each other (Barkan, 2020). Therefore, in public transportation, where mobility is gendered, family members are considered as individuals who have an impact on the daily activities of other members, particularly women who rely on their families.

Despite the importance of this topic and the substantial research about women's issues in travel, the topic of understanding family's perception towards women's travel remains one of the most under-researched areas in transportation.

## 2.4 IMPORTANCE OF PERCEPTION IN PUBLIC TRANSPORTATION

Perception is an instrument used to identify existing quality and expected quality from the commuters' perspective and experiences (Minhans, et al., 2020). It can be utilised as a lens through which we can view and act reality because perceptions influence how we focus on, process, remember, interpret, comprehend, synthesize, and decide.

Jager, et al. (2012) discovered that each family member can have diverse experiences to the same event. The reason for having diverse views is different beliefs, attitudes, and cultures. Understanding family perceptions and satisfaction after experiencing public transport services are crucial to the delineation of efficient future mobility programs. Developing or Muslim countries where females rely on men or other family members, using gender as a social category in transportation is important since it allows for the inclusion of all gender groups as well as incorporating other types of social categories, such as race, religions, class, into the understanding of how women move around (Akyelken, 2020).

It has learned that family structure is the key to shape women's travel patterns (Arman, et al., 2018). According to Dunckel-Graglia & Brook (2013), mostly men in the families believed that women are weak that they stand out as targets, and without the protection or escorting by men (i.e., women traveling alone), they become a high target for rape, etc. However, women themselves are not fearing of crime but rather do struggle to become mobile because of the deeply embedded cultural values which promote women as household figures and men as public figures (Amy & Brook, 2013).

The literature covers the following points based on the research questions:

1. Activities that encourage women to use public transportation
2. Reasons that encourage or discourage women's travel on public transportation based on family members' perception.

## 2.5 ACTIVITIES THAT ENCOURAGE WOMEN TO USE PUBLIC TRANSPORTATION

Gender and transportation studies conducted across the world have revealed that women make more journeys than men for a wide range of reasons (The World Bank, 2011). Most women travel to multiple locations daily as they run household errands, and other dependents to school as compared to men who often commute from home to work and back, with one additional trip in some situation. In other words, women use transportation to take care of their households and families. Women's trips (journey) are known as trip-chains because they frequently travel to more than one destination when they travel and often they go from one destination to the next on the same trip (Granie, 2018)

## 2.6 FACTORS THAT SUPPORT OR RESTRICT WOMEN'S TRAVEL BY FAMILY MEMBERS

From the theory of travel decision-making, following are the factors drawn to study the women's travel needs and issues on the public transport (Singleton , 2015).

### 2.6.1 FEASIBILITY

According to Singleton (2015), the most important prerequisite for choosing a mode of transport is feasibility, which includes mobility, time, skills and responsibility. He also refers to the practicality of traveling by that mode of transport considering individual or domestic constraints such as mobility, schedule, time, other commitments, familiarity about the destination and availability of the mode. He also noted that place of residence and ownership of a vehicle are important factors in the feasibility of transportation options. Individual, family and household factors such as the number of children, their age, gender, wealth or other related beliefs also limit the feasibility of some travel options. He emphasizes that travel would be impossible if the condition of feasibility was not met.

### 2.6.2 ACCESSIBILITY

The term accessibility refers to the possibility of a travel decision based on built and natural environmental conditions and includes elements such as important activities, the number of possible destinations, connectivity, and physical, etc. The difference between accessibility and accessibility is that accessibility refers to the physical environment that is conducive to travel, while accessibility refers to the internal component of the household that is possible for travel. However, the two terms can sometimes be used interchangeably. Accessibility is seen as necessary to access life opportunities. (Dunckel-Graglia & Brook, 2013). When individuals use public transportation, accessibility depends mainly on two factors: Proximity to destination 2) Connectivity or measure of network, barrier and routes.

### 2.6.3 SAFETY

According to Merriam Webster, safety is defined as 'the state of being safe from suffering or causing harm, injury, or loss.' In transportation, people make decision to provide them a basic level of safety from collision and security from crime. Pirra, et al., (2021) define safety as the prevention of unintentional and unpleasant events such as earthquake. Accident from car etc while security is the prevention of intentional unpleasant activities by people such as robbery, mugging, harassment and terrorist activities. The authors emphasize the importance of perception lens on safety and security that limit travel needs in their theory of travel decision making because objective measures of safety and security are likely to be less important than subjective judgments of them. The concept of safety and security is varying from one vehicle to the next. Based on their need for safety and security, people only pick travel options that provide them with the bare minimum of protection from traffic and crime. The following are a few elements that Singleton considers while deciding on a trip option in terms of safety: time, congested roads, vehicle speed, and weather (Singleton , 2015).

### 2.6.4 COST

The cost in the transport sector represents the amount of time, money, and effort spent on the trip choice. Time, monetary cost, physical effort, and convenience are all factors that impact travel costs. Time is the most direct expense of travel evaluated throughout the trip decision-making process. Depending on the manner of transportation, the value or influence of time may differ. According to research, decreasing travel time is the most important factor in route selection. Money spent during the trip option under evaluation is an apparent and essential cost issue. Physical exertion has a very significant cost, especially for active modes of transportation like public transportation and walking that rely on human energy. Convenience is one of the factors to consider when comparing the prices of various travel alternatives. The favourable impact of ease on travel decisions is frequently regarded as a factor in favour of driving (Singleton , 2015).

Considering the variables described above that affect family perspective towards women travels on public transportation, the conceptual framework has been developed to operationalise the topic of the research.

## 2.4 CONCEPTUAL FRAMEWORK

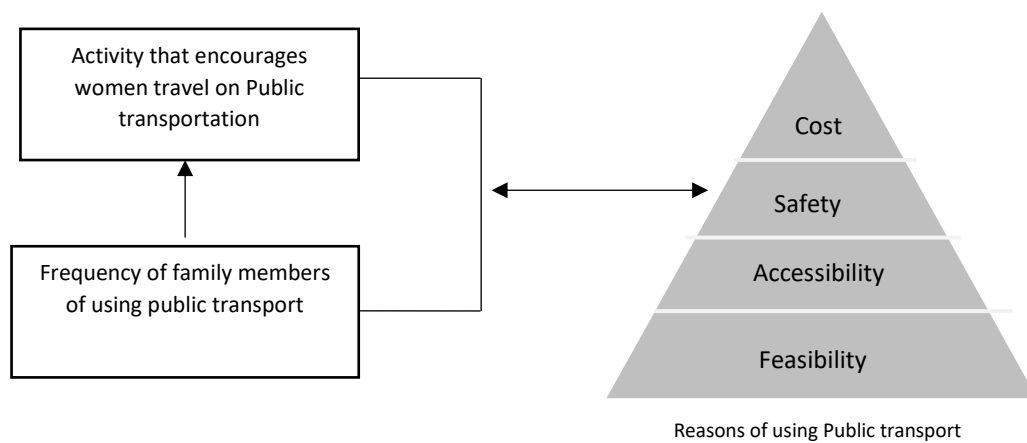
This study's conceptual framework is based on the theory of travel decision-making, a unifying conceptual framework of active travel behaviour (Singleton , 2015). It combines key travel-related concepts from economics, geography, and psychology with theories of active travel behaviour and empirical study. The framework abstracts an individual's thought process or view about short-term travel decisions and explains the activities, built environment variables, socio-demographics, attitudes, and perceptions based on existing norms and cultural values. (Singleton , 2015).

The study will look at the elements of travel needs that individual consider about making a trip based on the theory of travel decision-making proposed by Singleton's (2015). These elements are:

- Feasibility: practicality of making trip
- Accessibility: Proximity to Public transportation and its infrastructure
- Safety: Women's personal security and safety
- Cost: Monetary and physical cost, and convenience

According to the framework, it is important to determine how frequently family members, especially women, utilize public transportation and what activities cause them to do so. Based on the family members' travel experiences or view, it is implying that women's travel is influenced by feasibility, accessibility, safety, and cost of public transportation.

Figure 1: The conceptual framework for understanding the ways that family perception influence women's travel on public transportation



Note: The shape of the factors is not discussed in this study, the authors are unsure about the hierarchy of these factor since these factors based on perception and it varies person to person.

Source: Author (2021)

## CHAPTER 3: METHODOLOGY

This chapter describes how the study was carried out including research design, data collection methods, data analysis, sampling strategy and data analysis, as well as time framework and scope of study.

### 3.1 RESEARCH DESIGN

The family's perspective on women's issues on public transportation was explored in this research using qualitative methods such as storytelling (Green & Brock, 2000). The purpose of this method to obtain rich and valuable data bank based on individual. The American Association of Planning<sup>2</sup> has also emphasized the relevance of the story telling approach in transportation research, stating that it assists urban or transportation planners in understanding the underlying causes of difficulties (Green M Brock T, 2005).

Due to travel limitations, the researcher stayed in the Netherlands and conducted phone interviews with family members with the support of research assistants throughout the second wave of COVID-19 lockdown in the study region. The research assistant is a local who frequently utilises public transit. He is a social science graduate who was chosen because he has a strong command of the Urdu and Punjabi languages and has one year experience collecting data for social studies. The role of research assistant is to connect researcher with the families that do not have access to internet.

### 3.2 STORY TELLING METHOD

The story telling is one of the most appropriate methods in social science for studying human behaviour, emotions and experiences. This approach helps to understand the personal experiences of individuals and their interactions with others in order to fully comprehend the situation. According to Barling (2012), stories of suffering give proof of actual issues that can help in addressing the root cause through the process of gathering information from experiences and views of human beings (Wang & Geale, 2015).

The purpose of this method is to disclose the meanings of the individuals' experiences as opposed to objective and decontextualized truths. The storytellers construct their stories to convey a specific perspective of an event, and researchers use this method to investigate research questions that will assist them to interpret and experience the world of the respondent instead of explaining or predicting that world.

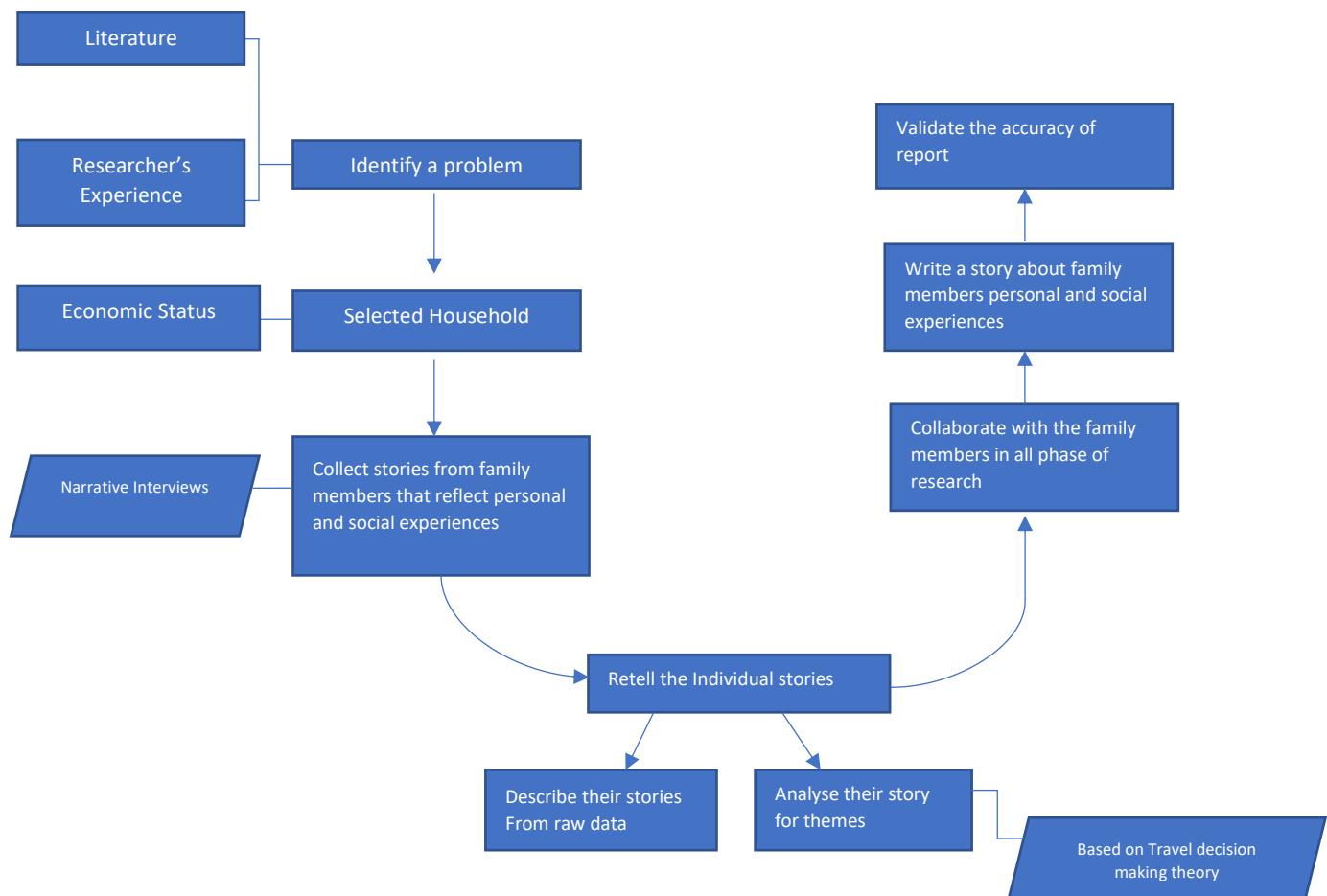
In this study context, researchers have expected that both respondents who travel or who do not travel on public transportation provide powerful insights based on their experiences to frame an effective public transportation system for women. However, this view does not reveal objective "truths" but instead reveals subjective truths for the participants within their social context. An informal chat regarding transportation tales was held with the participants. Following the collection of tales, the researcher examines the raw data, selecting essential aspects, arranging, and sequencing these pieces, and presenting a story that represents the individual's experiences. Throughout the

---

<sup>2</sup> American Association planning exist to developed common platform for diverse planning profession as it helps communities, leaders and inhabitants anticipate and meet the needs of a changing world.

method, the researcher collaborated with several individuals who were more willing to share their tales. The facts and particular themes that developed during the story telling method were then analysed by the researcher. Finally, the researcher shared the stories to the storyteller to confirm the validity of the report.

Figure 2:Methodology of Conducting Story telling Research



### 3.3 DATA COLLECTION METHOD

While considering the second wave of Covid-19, the researcher used online methods to collect both primary and secondary data.

#### 3.3.1 SECONDARY DATA

Before starting to collect data in the field, the most relevant existing literature regarding the perspectives and experiences of members in a family toward women traveling on public transit was reviewed using peer review journals, local and international newspapers, and books. All this information is summarized in the Chapter 3, which explains the elements that influence women's travel on public transportation. In addition to that, country's population was obtained by the research assistant from the Punjab Bureau of Statistics.



### 3.3.2 PRIMARY DATA

The primary data was collected through online interviews with the family's members from different households. The conversation has been planned with the time selected by the family members who willing to part in the study. Informed consent has been obtained during the initial conversation with each family members. All stories have been collected by the researcher itself. Field notes was written by the research assistant immediately following each interview. The recorded interviews were transcribed by the researcher. In addition, interview's results were supported with the photos taken by the research assistant of public transport to provide the pictorial information of the study area.

### 3.3.3 NARRATIVE INTERVIEWS WITH SEMI STRUCTURE QUESTIONNAIRE

The narrative interview assists in understanding people's behaviour and experiences through stories. The interviewees can tell their stories without being interrupted by the interviewers through this method. However, the narrative usually starts with open question relevant to the study area. In this study, a narrative interview was conducted in combination with semi-structured questionnaire (Appendix A) in which the researcher developed a subject guide indicating areas of interest and occasionally changed the guide based on responses from prior interviews. Since the research issue is highly sensitive and most family members, particularly men, do not want to discuss it, the research describe some of the researcher's own experience to create a friendly environment. The primary respondents selected for interviews are the family members living in one household. The interviews were conducted in the local language and recorded with the consent of interviewees.

### 3.3.4 SAMPLING STRATEGY

For this research, a total of 7 families has been selected. The purpose of taking small sample size it to understand the in-depth analysis of the phenomenon. The socio-economic condition of the living area of the selected families would also be taken into consideration which means the criteria for selecting the families were based on income status, specifically low or middle income. The choice to limit the study to low and middle-income families was based on the effort to keep the study population relatively homogeneous regarding income. Out of seven families, two are female headed household and rest of the household is male headed. To a get diverse opinion, two families with more females than males, and the other two families with more males have been selected. The remaining two families were chosen with a mix of males and females. In addition to that, purposive sampling was utilised to choose families for this qualitative research to subjectively explain the entire situation.

### 3.3.5 DATA ANALYSIS

Data processing have been done by categorized the data that collected through narrative interviews. In the first phase of the analysis, all interviews were transcribing which serves as a raw data. Then, raw data were processed into stories and shared with the family members who were interested to read. In other cases, the researcher explains the stories to the respondents. The collected data has been divided into six big categories based on the sub-questions i.e. frequency, activities, accessibility, feasibility, safety, and cost. Every category has a code and colour label through data can easily traced, for example data about frequency of using public transit has get code and specific colour such as frequency of using Public transport labelled 1 with yellow colour. All data has been categorised into a table in Microsoft word to establish link to the sub questions.

After analysing the data, it has been discussed through triangulation method in chapter 5.

### 3.4 ETHICAL CONSIDERATION

In carrying out this research, particularly during data collecting, the researcher considered and adhered to all ethical concerns. All data collecting methods were authorized by all respondents by asking for consent regarding their willingness to participate in research with the guarantee that all data would be anonymous. The goals of the research have been described by both the researcher and the research assistant before starting interview. The researcher assured that no one was forced to participate in the study. Moreover, researcher respected all the culture in the community therefore all interviews were started by requesting their guardians before starting the data collection. Besides, before doing the tape recorded, research assistant also asked the concern of respondents. Research assistant also keep distance while conducting survey with community in compliance to COVID-19 preventive measures.

### 3.5 TIMELINE

The following table shows the timetable of all research activities:

| Activities                                       | July |    |    |    | August |    |    |    | Sept |
|--|------|----|----|----|--------|----|----|----|------|
|  | w1   | w2 | w3 | w4 | w1     | w2 | w3 | w4 | w1   |
| Submission of Research proposal                  |      |    |    |    |        |    |    |    |      |
| Present to supervisors for feedback              |      |    |    |    |        |    |    |    |      |
| Literature review                                |      |    |    |    |        |    |    |    |      |
| Draft research Tools (Interview guide)           |      |    |    |    |        |    |    |    |      |
| Coaching session                                 |      |    |    |    |        |    |    |    |      |
| Planning and orientation with Research Assistant |      |    |    |    |        |    |    |    |      |
| Selecting and contacting Respondants             |      |    |    |    |        |    |    |    |      |
| Data Collection through Field Survey             |      |    |    |    |        |    |    |    |      |
| Data Analysis                                    |      |    |    |    |        |    |    |    |      |
| Report writing                                   |      |    |    |    |        |    |    |    |      |
| Coaching session                                 |      |    |    |    |        |    |    |    |      |
| Drafting of Final Report and Review              |      |    |    |    |        |    |    |    |      |
| Submission of Final Report                       |      |    |    |    |        |    |    |    |      |

Figure 3: Timeline of the research thesis

### 3.6 RESEARCH CONTEXT

#### 3.6.1 STUDY AREA

The research is conducted in Lahore, the second-most populous metropolitan city of Pakistan. According to the 2017 Pakistan census, the city has a population of almost 11 million people with an almost equal distribution of male and female residents (Anon., 2017). The city has various public transport vehicles including Bus Rapid Transit (Metro Bus), Mini vans and three-vehicle automobiles (locally known as motorcycle rickshaws) that supports particularly lower-income group commute to different areas of the city for work, education, and health care etc (Malik, et al., 2020).

Figure 4: Location of city of Lahore in Pakistan



Source: Google

### 3.6.2 SIGNIFICANCE OF RESEARCH & PROBLEM OWNER

In Pakistani culture, women's travel decision is highly influenced by their family members. This study comprises family members recalling their experience that has influences on their family's women's travel. Understanding the in-depth behaviour of users and their travel demand is essential for the 'Urban Unit' (the semi government department) to assess the existing or improving previously set alternatives of transportation operations. The Urban Unit is responsible for formulating policy options primarily in the planning, transportation, and environment sector throughout Punjab Province in Pakistan.

## CHAPTER 4: FINDINGS

This chapter covers the results of the sub research questions derived from the narrative interviews with various family members from seven households. The first sub question aims to discover how frequently family members utilise public transportation. The second sub question detailed the activities that encourage women to use public transportation, and the last sub question offered the reasons for promoting or restricting public transportation by family members through their experiences, which were organized under similar themes.

### 4.1 PROFILE OF RESPONDENTS

The demographic profile of the interviewees is shown in the table below:

#### Male Headed Households

Table 1: Profile of Respondents from semi structure Interviews

| Initials | Family type | No. of family members | Age | Income level (PKR) | Frequency of using PT | Activities to use public transport                  | Mode of Transport              |
|----------|-------------|-----------------------|-----|--------------------|-----------------------|---|--------------------------------|
| F1       | Male Headed | Daughter-1            | 20  | 25,000             | Everyday              | Education   | Bus, Motorcycle Rickshaw       |
|          |             | Daughter-2            | 08  |                    | One in a month        | Visiting relatives,                                 | Bus, Motorcycle Rickshaw       |
|          |             | Daughter-3            | 15  |                    | Everyday              | Education   | Bus, Motorcycle Rickshaw       |
|          |             | Daughter-4            | 18  |                    | One in a month        | Visiting relatives, Park                            | Bus, Motorcycle Rickshaw       |
|          |             | Son-1                 | 13  |                    | No                    |   | Motorcycle                     |
|          |             | Mother                | 40  |                    | Twice in Month        | Visiting relatives, clinic                          | Motorcycle Rickshaw            |
|          |             | Father                | 56  |                    | Every day             | Work  | Bus                            |
| F2       | Male headed | Daughter-1            | 27  | 20,000             | Everyday              | Education, shopping, visiting relatives, recreation | Motorcycle Rickshaw            |
|          |             | Daughter-2            | 23  |                    | No                    |   |                                |
|          |             | Mother                | 47  |                    | Once in Month         | shopping, visiting relatives, recreation            | Motorcycle Rickshaw            |
|          |             | Father                | 52  |                    | No                    |   | Motor Bike                     |
| F3       | Male headed | Son-1                 | 22  |                    | Everyday              | Work, Education                                     | Metro Bus, Motorcycle Rickshaw |
|          |             | Son-2                 | 14  |                    | Everyday              | Work, Education, shopping, visiting relatives       | Metro Bus, Motorcycle Rickshaw |

|    |             |            |    |        |                   |  |   |
|----|-------------|------------|----|--------|-------------------|--|---|
|    |             | Son-3      | 10 |        | thrice in a month | Work, Education, shopping, visiting relatives, recreation                          | Metro Bus, Motorcycle Rickshaw              |
|    |             | 1 daughter | 09 |        | Thrice in a month | Work, Education, shopping, visiting relatives, recreation                          | Metro Bus, Motorcycle Rickshaw              |
|    |             | Mother     | 44 |        | Once in a month   | Work, Education, shopping, visiting relatives, recreation, religious place, Market | Metro Bus, Motorcycle Rickshaw              |
|    |             | Father     | 50 |        | Everyday          | Work, Education, shopping, visiting relatives, recreation, religious place, Market | Metro Bus, Motorcycle rickshaw              |
| F4 | Male headed | Son-1      | 13 | 22,000 | Everyday          | Education  | Metro Bus, Local Buses, Motorcycle Rickshaw |
|    |             | Son-2      | 10 |        | Everyday          | Education  | Metro Bus, Local Buses, Rickshaw            |
|    |             | Son-3      | 8  |        | Everyday          | Education  | Metro Bus, Local Buses, Rickshaw            |
|    |             | Daughter-1 | 18 |        | No                |  |   |
|    |             | Mother     | 35 |        | Once in a month   | Visiting relatives,  | Metro Bus, Motorcycle Rickshaw              |
|    |             | Father     | 55 |        | Once in a month   | Visiting relatives, supermarkets   | Metro Bus, Bus                              |
| F5 | Male headed | Son-1      | 28 | 35,000 | No                |  | Own Bike                                    |
|    |             | Son-2      | 24 |        | No                |  | Own bike                                    |
|    |             | Daughter-1 | 30 |        | No                |  | Escorted by the male member                 |
|    |             | Mother     | 50 |        | No                |  |   |
|    |             | Father     | 49 |        | No                |  | Own bike                                    |

## Female Headed Household

| Initials | Family type   | No. of family members | Age | Income level (PKR) | Frequency of using PT | Purpose of using PT/activities                                    | Mode of Transport              |
|----------|---------------|-----------------------|-----|--------------------|-----------------------|---|--------------------------------|
| F6       | Female headed | Daughter-1            | 28  | 18,000             | Everyday              | Work and education  | Motorcycle Rickshaw            |
|          |               | Daughter-2            | 22  |                    | Everyday              | Work and Education  | Motorcycle rickshaw            |
|          |               | Daughter-3            | 18  |                    | No                    |   |                                |
|          |               | Daughter-4            | 13  |                    | No                    |   |                                |
|          |               | Son-1                 | 10  |                    | No                    |   |                                |
|          |               | Mother                | 55  |                    | Everyday              | Work, Education, shopping, visiting relatives, recreation         | Local Bus, Metro, rickshaw     |
| F7       | Female headed | Daughter - 1          | 20  | 20,000             | Everyday              | Work, Education, shopping, visiting relatives, recreation         | Motorcycle Rickshaw            |
|          |               | Daughter - 2          | 18  |                    | Everyday              | Work, Education, shopping, visiting relatives, recreation, clinic | Motorcycle Rickshaw            |
|          |               | Daughter - 3          | 11  |                    | No                    |   |                                |
|          |               | Mother                | 44  |                    | Everyday              | Work, Education, shopping, visiting relatives, recreation         | Motorcycle Rickshaw, Local Bus |

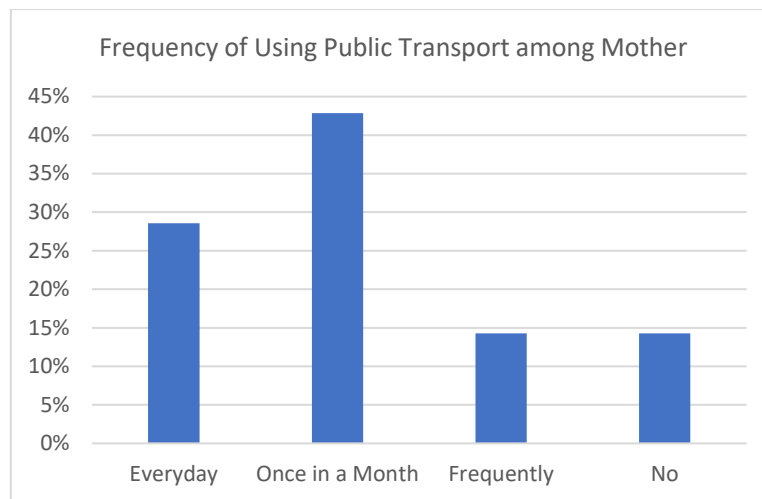
The table above shows the household type, income, frequency of using public transportation, activities of using public transit and mode of public transport of interviewed family members. The initials in the table reflect the coding of the families and family types shows the family's primary income generator. The income generator in the family in Pakistan culture is considered as a decision maker. The monthly income of family is shown in Pakistani Rupees (PKR).

According to the data presented above that families with monthly income less than 25000 pkr use public transportation. Families with an income of more than 25,000 per, they do not use public transportation. They prefer para transit vehicles such as UBER, CREAM or private rickshaw to travel.

### 4.2 FREQUENCY OF FAMILY MEMBERS USING PUBLIC TRANSPORT

The data in the table 1 shows that female-headed households utilise public transportation more frequently than male-headed households. However, in case of male headed household, it is observed that frequency of using public transportation among mothers is less than the rest of family.

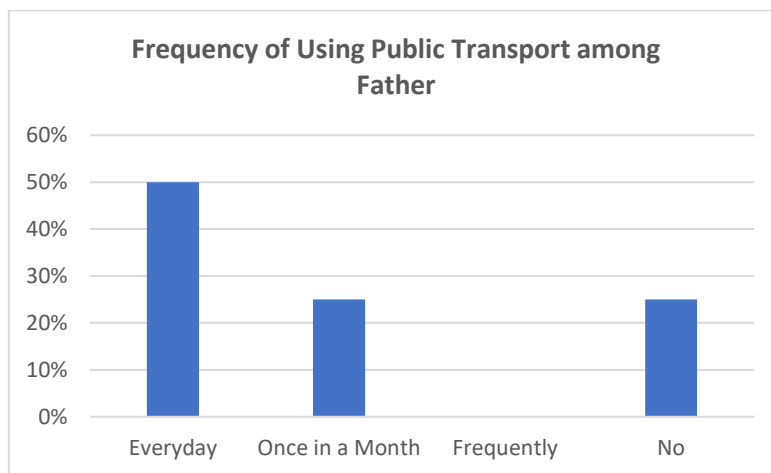
Figure 5:Frequency of Using Public Transport among Mothers



Source: Author

According to the results from semi structure narrative interviews, fathers are more likely to use public transportation than mothers

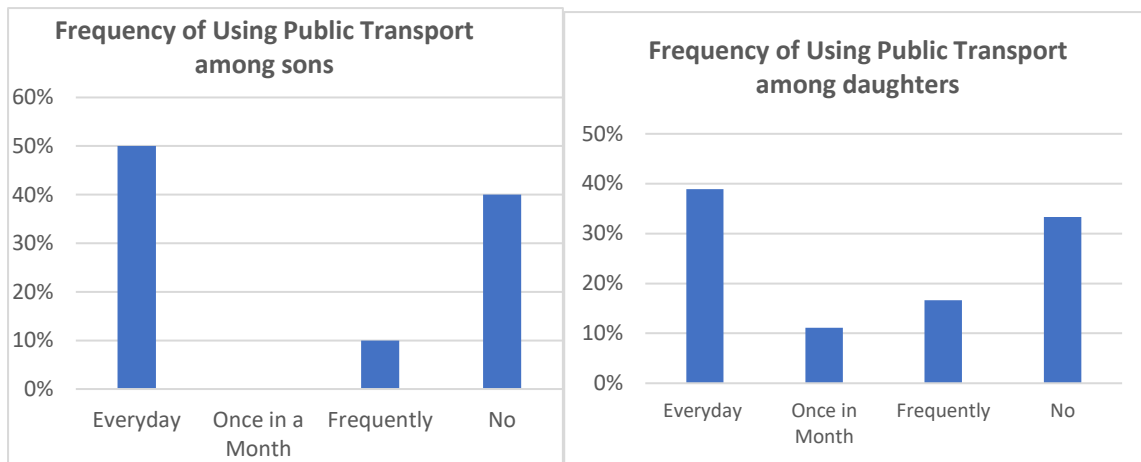
Figure 6:Frequency of Using Public Transport among Fathers



Source: Author (2021)

The young generation is more likely to take public transportation than their parents. It was also discovered that daughters used public transport more than the sons. Both male and females use school buses, metro or local buses to go to school.

Figure 7:Frequency of Using Public Transport among sons Figure 8:Frequency of Using Public Transport among daughters



Source: Author (2021)

The results also revealed that females do not use public transportation in families with more male members. Based on the narrative interviews, most male members, particularly sons and fathers, do not want to make trips by bus or rickshaw, and they also do not let their female family members to travel by bus or motorcycle rickshaw.

The interviews 'results also discovered that despite their limited income, most of families have a common motorcycle. The male members in families prefer to take their mother or sisters on motorbikes or sometimes they do use private rickshaw to visit their relatives with the whole family.

Image 1:man escorting a woman on motor bike



Image 2:Travel Modes in city



Source: Research Assistant (2021)

## 6.2. ACTIVITIES OF FAMILY MEMBER USING PUBLIC TRANSPORT

According to the results, there are three main activities that family members undertake using public transportation i.e., Education, work and visiting relatives. The prevalent mode of public transport in the Lahore city is Metro Bus, mini vans and Local Motorcycle Rickshaw. Based on the findings from



narrative interviews from family members, mostly women use family transport for making shorter trips such as going to school, nearby supermarket, clinics and shrine.

The results also revealed that both sons and daughters use public for education or work, whereas parents mostly use public transportation to go to the market, work, visit relatives, clinics and religious shrines.

It is discovered that female headed household prefer auto rickshaw for short trips such as employment, schooling, and shopping. In case of male headed household, female mostly use public transportation for visiting their relatives travel or shopping once in month with other member such as their sons, daughter or husband.

### 6.3 REASONS FROM FAMILY MEMBERS TO USE PUBLIC TRANSPORT BY THE WOMEN

According to the findings of the semi structured interview, the following are the reasons that family members affect women's use of public transportation. Before proceeding, it is worth noting that during the interview, it was discovered that each mode of public transportation, such as motorcycle rickshaw, bus, and mini vans, is associated with a unique problem for women, which is explained below. However, some common factors have been discovered and highlighted to better understand the challenges of women's travel on public transportation through story telling method.

#### i) Feasibility

A 27-year-old daughter from the household labelled as F2 in the profile of respondents who is working in a call centre sharing her dissatisfaction about the time schedule and status related to the bus stop:

*The major problem for me with public transportation is that there is no set schedule for the bus, so I must stand and wait for extended periods of time, which is particularly inconvenient at night because some sex workers also stand at that bus stop waiting for their clients.*

It was discovered from interview results that local buses operating within city has no time schedule, therefore people usually shift to other transport vehicles, according to a university going girl saying that:

*'I waited longer time in school for bus arranged by the school to get home. Going to university, it was a 2 km distance from the bus stop to my home therefore I used a motorcycle rickshaw (locally called Qing qi) where ladies generally sit at the rear side of vehicle'.*

A father belongs to the household (F5) who do not use public transportation showed his concern of allowing her daughters to use public transport stating that:

*I can only allow if there is small route to travel on only metro or any public transport which is registered with some companies like UBER or CREAM. Other buses in Lahore city are so crowded and people take advantage of the crowd.*

There is a social stigma associated with using public transportation in Lahore city which presented challenges for women to get education. A young girl, who was sharing her regular routine of going outside during interview mentioned the shame of taking public transportation:

*'if you use public transit to get to work, I face social stigma. People in our culture often judge you based on the mode of transportation you used. I remembered I was chosen for interview for a teaching position at reputed school, but I was turned down because I have been opted public transportation for my travel. The teacher in that school must arrive school on private vehicles else would not be respectful*

*to teacher because all the students in the school belongs to elite families. I would prefer that my company where I'll get job offer transportation for me to and from work since it saves me money on public transit while also providing me with a safe and welcoming environment. Since these incidents make us more tortured than guys. It's an ordeal more than a trip'.*

According to the interviews from mothers and daughters showed that wearing a burqa (loose dress) is safe for women to avoid any mishap outside particularly using public transport, in this regard, a daughter who shared the reason of wearing burqa on public transportation:

*I have no other option than to take the bus to get home. I live in the remote town. Because there is only one bus that leads to the place where I live. Both women and men sit together in the minibus. I even started wearing a burka (loose dress) to cover myself else mother would not allow me to go outside. The reason of wearing burka save me from the temptation from men towards women, but despite of that the journey always frightful for me due to the fear of sexual harassment on the minibus.*

### **Summary**

According to the stories, incidents, or opinions of family members from the interviews, the practicality is seen as an essential consideration in selecting transportation for women by family members or by women themselves. The time schedule of the buses compelled women to shift to motorcycle rickshaw without their consent. Local vans or rickshaws in the city are generally not privately held by the drivers and are not registered with any companies, which makes family members cautious of utilising their ladies. Furthermore, activities that occur in a specific area at a specific time, such as a sex worker waiting at a bus stop at night, influence women's travel decisions to travel at that time. Wearing a cloak or burqa that covers your body allows women to go on public transportation with family members; nevertheless, the social stigma of utilizing public transportation among the younger generation sometimes restricts them to using buses, auto rickshaws, or small vans. Households that located far from bus terminals and able to buy motorcycle do not want their ladies to ride on buses or rickshaws, preferring them to accompany them.

#### **ii) Accessibility**

Most male family members or guardians are concerned about the family's access to public transportation. In this context, during a narrative interview, a father expressed his concerns about not traveling by bus with his family, which is distant from their home saying that:

*'I used to take bus since I don't know how to ride a motorcycle. When I travelled with my wife or children, I chose private motorcycle rickshaw because it is safe and allows me to travel with my family and dropping me off at the correct spot. The lack of a direct route is one of the reasons I do not use public transportation with my family'*

Similarly, a son, who owned a bike and expressed his dissatisfaction of using motorcycle rickshaw for her mother and daughter to get into the metro bus:

*'The only problem is that metro bus is not easily accessible to my home and I would not prefer to go my sister to use auto rickshaw to go on public transportation. Because bus stop is far from my home Therefore, I bought second-hand motor bike to escort them to places where metro bus is not available. I don't even want my mother or sister to go in a motorcycle rickshaw since males are sometimes stalking, catcalling, or commenting about ladies travelling on motorcycle rickshaws'*

### Summary:

The findings of the interviews revealed that people want to use public transportation, such as the metro bus, which is designed to international standards, but it is not available near their door or in their neighbourhood, and the availability of services such as motorcycle rickshaw is not safe for them. Therefore, most girls rely on their male family members, and many of them simply stop using transportation.

*Image 3:Both auto rickshaw (private) and Motorcycle rickshaw (public) drivers waiting outside the market*



Source: Research Assistant (2021)

*Image 4:Motorcycle Rickshaw and Bus*



Source: Research Assistant (2021)

### iii) Safety

During an interview, a mother described that public transport like metro bus or train are reliable for their daughter since it doesn't stop randomly.

*'I believe that daughter is safe on public transportation like metro bus because it has specific stops to get off from bus. When I was young, my friends came to my place by train, my brothers had escorted*

*them to train station and at the destination, her family member also pick them up. I prefer Metro or Orange lines; it does not stop anywhere except the designated stations'*

One of the male family members showed his concern about using metro buses based on the safety by saying that:

*'I prefer public transportation such as metro buses over other forms of transportation, such as motorcycle rickshaw and minivans. I don't want to put my sister or mother at danger of being harassed outside or on public transit. The reason is that metro is always on time and cameras on every station. There is also proper check and balance on it.*

One of the female respondents, named as F7, shared her worries about thieves roaming in the streets stating that:

*'The major challenges for my daughters are that bus stops are distant from our house; so, in the early morning either my son or I escort them to bus stop and ensure that they would board safely on bus. The reason for escorting is because the streets are deserted in the morning and there are drug addicts roaming about, and there have been reports of mugging on our neighbourhood'*

Among the respondents, a father connected his experience of being robbed by two ladies to women's travel indicating that even women are not safe with women:

*'I went shopping with my friend who dropped me off in the city centre on motor bike. After I finished with buying, I walked to nearby bus stop with a shopping bag containing my Eid festival clothing. There was a desk on the bus stop under the shade of tree. It was a scorching day. I saw two women sitting on one side of the desk. There was a space for the other passengers to sit on the desk, so I hesitated a bit but then I observed that women sitting on the bus looked mature thus I decided to sit on the desk while waiting for bus. In the meantime, I was so thirsty and saw a water tank just a few steps away, thus I stood up to grab some water. In my haste, I left my shopping bags on the desk. When I returned, I found my bag disappeared.*

*I struggled to find but all in vain. I desperately sat down with my lowered gaze wondering that where it had gone. In the meantime, I saw my bag in one women's shopping bag. I said abruptly ye tw mera shopper ha, bibi! (this is my bag, sister). In respond to that, women began shouting, ye tw hamra shopper ha, hum khareed k laye hain (this is our bag, we bought it). Our voices gradually became louder and louder, and a people were gathered. Upon seeing the crowd, a police officer came and started inquiring, the women had already checked the bag, thus they describe all shopping stuff inside the bag. Everyone thought that I was the real thief. When situation became out of hand I requested to police officer, aik bar es dukman pr ja kr poch lain (please just for one time come with me to the shop where I Bought the stuff). As the women heard this, they began yelling and when the police officer moved towards the shop, the women attempted to flee proving them to be real thieves. Soon, my luggage was handed over to me by the police officer.*

*That day, I thought that the transportation issue was not limited to women; males were also subject to such circumstances. Because my girls and wife are incapable of dealing with such human beings thus I would prefer that they travel with me on transports liker bus or rickshaw so that I can protect them'.*

Another girl shared her everyday worry about using buses or motorcycle rickshaw:

*'Metro buses that take me to work are so crowded, some people board on these buses just to pickpocket. As a result, I must be careful to grip my luggage too tightly during my journey After existing the metro, I usually have two options either to take bus or paratransit such as rickshaw or mini vans'*

The major issue on the public transportation is sexual harassment which makes unsecure environment for women and restricting many women to use public transportation. This was confirmed by a girl from an F2 household who related an experience of taking a minivan from home to school, saying:

*'My home is about 19 km far from my school and I have to change here vehicles to go to school. There was only one mini to go to main station where both men and women can sit together. On our way home one day, my friend and I sat in the front seat of a minibus with the driver. girls usually sit in the front seat while rear seats are occupied by men, before we started our journey, I had suspected the driver wasn't a good man, but we didn't have other affordable option to travel. Although we two girls were packed into a single seat it was awkward. In no time after starting my journey, the bus driver had attempted to touch me several time while adjusting the gear acting that he did unconsciously. Because there were just two girls in the minibus, I neglected this act the whole trip. when I got at my destination and paid the driver in cash he also tried to grab my hand which made my blood boil. But I couldn't do anything since my mother told me that responding these men would result in endless conflicts that would harm women.*

An elderly woman who was sexually harassed on the street is still traumatized as a result of her ordeal, stated that:

*'Men in our culture believe that if mother/ sister/daughter travel alone what our society would say. But what if they abandoned us, how could we survive. I was 11, standing at street shop waiting for my turn to buy street food called 'naan chany'. The man standing behind me touched my ass thrice. I was fearful, and as I turned back to see his face, he grinned. I prayed that he wouldn't touch me. I never told anyone about it; I'm now 50 years old and it's still in my mind. our streets are not secure, we cannot allow our girls to go out alone. Men in our culture are not mature enough to protect women'.*

Another lady shared the following experience of sexual harassment on the crowded streets:

*'I have to rely on my brother to go out every morning before going for home. The road leading to the Metro Bus stop is quite busy and crowded. I used to go through these streets with a lower gaze to avoid those who stared at me from head to toe. I don't feel insecure while walking in the street that someone could be groping me. After passing the street, I must wait at the bus stop to catch a bus not knowing the timing of bus. There is no appropriate place for sitting or standing at the bus place, Since the climate is very hot in Lahore city, thus I exposed to hot weather or pollution easily which causes my skin problem'*

Based on the girl's experience with various modes of transportation, she summarized her main issues with all modes of public transit.

*In case of using minibus, the girls usually sit in the front seat of bus or sometime in the back. It is so crowded that sometimes other commuters particularly men want to enter your personal space, creating situation uncomfortable for me. The same is true for rickshaw, sometimes you must share rickshaw with other men, and they try to grope you. I do not respond them, the only thing I do to ignore them, otherwise they might stalk you or create more problems for me after that.*

A mother expressing her anxiety of using public transportation by their daughters:

*I've never felt comfortable allowing my daughter to utilise public transit to get to school, college, or university. Because of where the bus dropped my daughter off, she finally walked alone from the bus stop to her house. I'm constantly worried that on her journey home, she could have come across with someone who might cause her harm. So, whenever she was about to arrive, I would generally hang off the terrace to ensure her safety while looking in the street. I'm anxious all the time when she is outside, and I keep tracing her by calling. I do not trust public transport and even walking alone for my daughter is secured.*

A boy hesitantly shared young boys 'thoughts about girls using buses or rickshaws

*we as a boy think we are more comfortable with the group of boys in the public transport since we do not have any restriction on our ourselves to protect or look after girls during traveling. Secondly I travelled with the boys and most of time they brag about sharing the eve teasing girls with friends and sometimes I'm afraid that other boys will also pass comment on my sisters if they travel alone or on public transportation.*

A 30-year-old lady mentioned the homo sexual harassment on the streets of the city by saying that:

*'This isn't only a female problem; males can suffer from it as well. One of my cousins told me about an incident in which he was waiting for a bus, stood at the bus stop, and a bus came to a stop, and a man driver stepped outside and asked him to get a ride by saying that he was also heading in the same way. He agreed and sat down next him. After a while, the driver tried to harass him by placing his hand on his thigh. My cousin freaked out and asked that driver to stop and then he got off the bus.'*

According to the interviewees, it has been learnt that women desire inclusive space in addition to limited sitting arrangements, in this context a 25-year-old boy shared his story when he was undergraduate student:

*"Last year, I worked for a US-based firm late at night. On my way home from work one day, I noticed a female (whom I had seen many times at my university) standing at the bus stop at midnight. Because it was taught to women and girls in our society to stay indoors after dark for their own protection, I was perplexed as to why she was standing at the bus stop at this time. I approached the girl asked why she was standing at the bus stop so late, instead of responding, she attempted to ignore me. I took a step back and stayed there for a while to ensure her safety without being asked. Soon after a rickshaw (three wheeled vehicle) arrived (This vehicle has a seating capacity of six passengers, three on each back and front seat) and four men sat on it; two on each side. She first ignored the rickshaw by turning her head to the other side pretending that she didn't want to ride on it. After seeing the situation, the driver insisted the girl to sit on the front seats to ensure her safety and inclusiveness (girls prefer to sit in the front seat) and requested the man, who was already seated, to move to the back side of the rickshaw. When requested to switch the seat, the individual who was supposed to change the seat, got offended, stood up, and began mumbling about the situation. The young girl agreed to sit because I assumed that she had no other way to go now. I realized that everyone should think about the respect and safety of females because we don't know what conditions force them to be outside at midnight.*

### **Summary:**

According to the interviews, several respondents were satisfied with the city's new bus system in terms of security, as the entire system is equipped with cameras. Most respondents, however, were concerned about overcrowding on these systems because to the risk of being mugged or molested by

sexual harassment. It has also been observed that many women are afraid to go down the street, stand at bus stops, or take public transit late at night, while others are anxious even during the day on an empty or congested street with the fear being robbed or sexually harassed. In the case of utilizing a motor bike rickshaw, both safety and security are major concerns for women traveling with family members. Respondents were upset about the drivers' attitudes towards women, over speeding, and the seating arrangement on motorcycle rickshaws.

Image 5: Bus stop occupied with rickshaws



Source: Research Assistant (2021)

#### iv) Cost

The main reason of using public transport shared by the family members is that it is less expensive. Their income does not allow them to use private transportation, therefore sometimes they compromised other factors over cost. A mother who is anxious about her daughter's traveling on public transport:

*We cannot afford to hire private transportation to travel. Because I am the sole breadwinner and am responsible for upbringing of three girls. My spouse died three years ago, so all my daughter's responsibilities suddenly fell to me. I used to travel with my husband on his motorcycle, but after he died away, the only choice we have is to use public transportation such as bus because it is inexpensive, and I work as a cleaner in an office close to city centre. My monthly income is very low therefore using bus is the optimal option for me.*

A young girl also shared her concern of using bus for work:

*I use public transit to get to work because I work in a call centre. I cannot afford to travel by private vehicle.*

A single mother with only daughters expressed her discontentment with the motorcycle rickshaw's fare mechanism

*'The reason for arranging private auto rickshaw for her that when she was too young when her father was died. She is still in that trauma and I don't want to put her through in the harassment situation. It will have an adverse impact on her education. However, it's so expensive that sometimes I must forego food or clothing stuff in order to afford private rickshaw. There is no system of regulation or inspection for the fare of these private transport. In addition to that, if there is night, the driver of the motorcycle*

*rickshaw takes advantage of the fact that women have no other alternative currently to charge extra for females.*

The boy from the household described as F3 in the profile of respondents shared his comfort metro bus based on his mother's experience:

*'My mother occasionally takes the metro bus and I accompany her from home to the bus station. Metro bus, in my opinion, is better to any other local bus service in Lahore since it arrives on time and specific stops, even though there is no distinction between men and women seating arrangement, they manage to designate two separate front doors for ladies and males cannot enter from that entrance. They also managed to retain a distinct area for ladies, though it's too small.'*

The issue of overcrowding on the buses is a serious issue and creating many problems for all ages of women. A 20-year-old girls stated that she prefers motorcycle rickshaw to buses, stating:

*'I have health issues, and I cannot go by bus at my menstrual time since it is too crowded and hot, and I get diarrhoea and the issues like unwelcome contact from strangers on buses make me quite uncomfortable. As a result, in those days, the other option for me is to take a motorcycle rickshaw, which is also inexpensive and sometimes brought me near to my front door. But the issue on using motorcycle rickshaw driver is that almost every day I face sexual harassment, because most of the drivers try to grab my hand while taking money, do over speeding and played loud inappropriate music when they find girl alone in their rickshaws, all of these make an uncomfortable situation for me. Therefore, I decided to ask my brother to pick me up on his bike from bus stop to home. If my brother is not at home at the time, my uncle or father would ride his motorcycle to the bus stop'*

During the interview, a boy mentioned his mother's problem on the metro bus:

*My mother experiences some travel difficulties, such as not being able to get a seat on metro bus during peak hours therefore she prefers to use metro bus during off peak hour.*

A dad who takes the minivan to work expressed anxiety about his girls seating arrangements on public mini vans

*'I remember taking a minibus from work to home; I usually sit in the first row of mini-van so that I could simply get off. I saw one day a young woman joined the bus and took the empty seat behind me. I assumed it was her first trip on a minibus because ladies are expected to sit with the driver if they are alone on minibuses or group of two to three women sit on one seat so no man can sit with them.*

*At the next stop, I saw two laborers waiting for the minibus, and when it arrived one guy standing outside leaped to board, the girl seemed to little hesitate and shouted at him, 'Stop, let me get off this bus!' Hearing the girl's shout, the driver arrived and insisted the women putting a bag to keep themselves separate, but the girls refuse and got out of the van. Girls or women is our responsibility, we must take care of their needs. To avoid any mishaps with my daughter, I always escort her on mini-van or rickshaw anywhere she wants to go. Another reason is that I don't even like that my daughter goes alone, its again my culture and values'.*

A young lady also shared his experience about inclusive seating arrangements for women in the public transport.

*'I sat in the rickshaw and this other man came in and told the driver to leave because he was getting late. The man sat next to me as if there was not space on other side. I began to move towards the*



*edge, and he kept shifting. He did not touch me or anything, but I was too scared to say anything as I was about 14 back then and not knowing how to deal with such men. The entire journey was dreadful, but I managed to reach the place and darted out of the auto. For me, girls should be strong to say things when they realise it goes wrong’.*

Image 6: Overcrowding on Metro Bus and its station



Source: (Malik, et al., 2020)<sup>3</sup>

### Summary:

According to the findings of the interview, the most significant factor motivating respondents to use public transportation is cost. Their financial situation only allows them to travel by bus, motorcycle rickshaw, or minivan. However, the definition of comfort varies from person to person across various types of public transit. According to the findings of the interviews, the limited number of female seats on public transit brought challenges for older women. Meanwhile, the combination of limited seats and overcrowding issues causes difficulty and subjects them to sexual harassment as there is no barrier between men and women. Furthermore, overcrowding and covering the entire route while standing are causing health issues during their menstruation in hot weather. Based on the research interviews, women in the city want separate areas for women to retain their comfort since they are uncomfortable sitting with stranger males on public transit.

<sup>3</sup> The metro bus is closed due to COVID-19 lockdown; therefore researcher used this image from prior research

## CHAPTER 5: DISCUSSION

Based on the results of the narrative from the family member, this chapter presents the discussion of findings with relevant literature or researcher's own experience on the public transportation to draw the conclusion that can be useful to make recommendations in order to achieve the research objective.

### **Importance of Women Using Public Transportation**

The interview results revealed that women are the major users of the public transportation. There are various reasons associated with this. To begin with the women who are widow, divorced or single or have only son or spouse have no other choice except to use public transport for travel. This is because riding motorbike or scooter by the women is not acceptable in Pakistan. Also, private transport according to the interview result is too expensive thus female headed households cannot afford to travel with it. In this regard, taking public transport by their daughters is the last option to go to school, shopping or visiting relatives. In 2018, according to the World, out of total Pakistan population 12.5% household belongs to female headed household category (The World Bank, 2018). Besides that, Grannie (2018), also mentioned that mostly women use transportation to take care of their households and families. This is in line with the study's results that females in male-headed households utilize buses or auto rickshaws in the city for shopping, visiting relatives, or going to the doctor.

The women who are living in a household headed by men still use public transportation for visiting relatives and clinics with their spouse or father. However, the frequency of using public transportation among these women is less than the female headed household. The reason is that son or husband in the family run all errands such as grocery, shopping. Moreover, the tendency of using public transport for education is also less among girls in those household because of being escorted by their brothers or father on a personal motor bike. Thus, in the case of male headed household women make trips on public transportation for their leisure activities or visiting hospital as compared to female headed household who use public transport for their living.

### **Reasons for family members to support or restrict women to take public transportation**

The findings revealed in-depth issues that family members believe influence women's use of public transportation. According to the Singleton theory (2015) on travel decision making, safety, affordability, accessibility and affordability, feasibility are the five main factors that influence on the decision making of individuals. The findings of the research revealed the in-depth categories lies under these factors for women's travel on public transport.

#### **i) Feasibility**

The results of the interviews showed that time, place, age, familiarity with the destination, household income status, availability of transport and social norms were related to women's use of public transport. This implies that women cannot use public transport because of lack of bus timetables, lack of access to transport in remote areas, lack of sufficient income, and lack of knowledge of where to go or if there are other means of transport to carry out their activities. This is in line with Singleton's (2015) theory of travel decision. In addition, the research findings revealed that women in Lahore city were more conscious of the status of the place where they waited for vehicles to board. For example, immoral activities at bus stops prevented women in the city from using the bus. ITF (2018) also mentioned that women in many countries always

consider the status of the place (bus stops, train stations, public places) before using public transport. However, it is beyond the scope of this research to discuss the design of public spaces such as bus stops.

## **ii) Accessibility**

According to the results of the survey of family members, women's travel by public transport is hindered by accessibility. The largest bus network, e.g. Metro Bus, is far from many households belonging to the lower or middle income group, so access to buses is not possible for all family members. According to the World Bank, accessibility is one of the most important factors that make many people to use public transport (The World Bank, 2011). However, the lack of accessibility to the transport network leads to unequal opportunities in the society (Akyelken, 2020) and the problem of accessibility has different impacts on the social and economic life of women, which is evidenced by the result of the survey that many women quit their jobs because there is no direct connection by public transport from their homes to work. In addition, the lack of safe pedestrian routes in the city of Lahore contributes to the inaccessibility of public transport, which emphasises the importance of interventions on the streets that promote women's walking activities. (Malik, et al., 2020).

## **iii) Safety**

The aspects that must be addressed for women traveling on public transportation are as follows:

- From the results of the interviews, it appears that for women who use public transportation, personal safety is more important than traffic safety, which is different from using a bicycle or walking according to Singleton's theory.
- The results of the interviews show that harassment is the main problem for women on public transport. Women are also concerned about harassment on deserted or crowded streets, which was neglected in Singleton's theory. Hail & McQuaid (2021) point out the consequences of sexual harassment: many women are kept at home by their family members, which limits their earning potential.
- Driver behavior also has an impact on women using public transport for short journeys due to concerns about safety, which leads many women to avoid public transport. The study found that the main problem with paratransit such as motorcycle rickshaws and minibuses is inappropriate driver behavior. This finding provides new insights into the problems faced by women in these vehicles. Therefore, further research on driver behaviour in Lahore is needed to improve women's entry into these modes of transportation.
- The results suggest that the time of day and night affect women's decision to use public transport, which is important for women's safety.
- The results show that most men in the families believe that women are weak and without the protection or accompaniment of men (i.e. women travelling alone), they are a high target for rape, etc. Thus, it has been proven that family structure is key to women's travel behavior (Dunckel-Graglia & Brook, 2013). However, studies and researchers' experiences of being accompanied by a family member have shown that this does not always ensure the protection of women but reduces the risk of sexual assault, but most situations resulted in blaming women and placing restrictions on women when travelling. (Muñoz Boudet, et al., 2013)

- A 2014 study conducted by European Union Agency for Fundamental Rights (FRA) highlights the importance of safety in public spaces when using public transportation. Since women's safety is mainly about family honour, guardians, spouses or brothers have the duty to protect women in the family. The reason is that when women are harassed, they endanger their family honour, ruin their own reputation, risk the future of their children, or face being abandoned by their husband or a family member. So, for reasons of safety and for cultural reasons, family members have a strong influence on women's journeys.

#### **iv) Cost**

An obvious and important cost consideration is the money spent during the travel option being considered. The survey of family members of different households revealed that majority of the transport users belong to the lower- and middle-income group. The survey of family members of different households revealed that women use motorcycle rickshaw for short trips because the mode of transport is conveniently available near the house. Thus, it is found that minimizing travel time is of utmost importance for women. It also requires less physical effort to get to the destination compared to the metro bus system where one must use the stairs to get on the bus at many stations, which can be a barrier for many women, especially older or pregnant ones, to use public transport.

The positive impact of convenience on travel decisions is often seen as a factor in favor of private transport. This is because the results of the survey showed that various problems on public transport such as overcrowding, limited seating, weather and no physical barrier between men and women discourage them from using it.

#### **Reflection as a researcher**

Choosing the qualitative method for my research was challenging for me at first, as it was my first time conducting a qualitative study. But under the supervision of Dr. Annemarie, I was able to figure out the research strategy for conducting this study, which is the storytelling method. Despite the fact that I wanted to understand the causes of the study area, this method was also chosen for the reason that it was convenient to collect the data during the second wave of COVID -19. To minimize the challenges in conducting the narrative interviews, the researcher hired a research assistant who connected the researcher with the study population. The researcher conducted the narrative interviews himself. The first two interviews were conducted on a trial basis with the help of the research assistant and were revised based on some of the questions and strategy used in conducting them. The researcher discovered that the male members were not willing to share their problems with the researcher, so the strategy of telling the researcher's personal stories about public transport increased the respondents' confidence to share. It was also found that male members do not like to ask directly about their female siblings such as sisters, daughters or mothers. Therefore, the researcher twisted the question to ask about their friends, relatives or cousins instead of using sister, wife or daughter. During the interviews, there were no technical problems as the researcher paid a certain amount to the research assistant to charge the internet package for the interviews. I approached the interviewees using the snowball method, so it was easy for my research assistant to approach the families and connect me via audio or even video call in some cases. The reason for selecting the men was to help me collect data for photos of public transportation. But unfortunately, on August 14, there was an incident in the city where 100 boys assaulted a Tiktok girl, so he refused to take photos because the government imposed strict conditions as there are also women on the streets and they

are not allowed to take photos. That's why my mother and sisters helped me to send the picture. Moreover, Metro Bus is currently closed due to Covid-19 lockdown, so the research assistant could not take pictures of the busses. The researcher used pictures from previous research to support the findings. After analysing the data, the researcher sent the first draft to supervisor. After receiving her feedback, I realized that my discussion technique was not satisfactory. So, I re-read the chapter I had taught on research design and implementation and updated both my discussion and the literature. In addition, the previous assignment in the Mini-Research and Management of Development and Professionalism module helped me to re-understand the writing techniques for the thesis. I have learnt that research is not a straightforward procedure but an iterative and time-consuming process, and I have learnt how to conduct research in limited time and with limited resources, even when outside my field of study. This will also help me in my long-term career goal of conducting research.

## CHAPTER 6: CONCLUSION

The purpose of this article is to understand family members' perspectives on women's use of public transportation. As women face many problems in public transport, story-telling method has been used to get an understanding of their concerns. Pakistan has a strong family structure and women's travel is controlled by their family members who sometimes encourage or restrict them depending on their experiences and views.

It was found that most of the people who use public transport are low or middle income. Metro busses, minivans and motorcycles are the most common forms of public transport in the city. Young people, both daughters and sons, use public transport to a greater extent than their parents or guardians. It was also observed that female-headed families in Lahore use public transport more than male-headed households because there are no men in the household or, in most cases, they do not have sufficient funds to hire a private rickshaw or other mode of transport to commute. The most common reasons for women to use public transport are for education, work, visiting family, visiting a shrine, or going to the hospital.

From the narratives of the family members, each mode of transport such as busses, rickshaws or minivans has some advantages and disadvantages that vary from person to person. According to family members, it is challenging for women to use public transport when there is no proper bus schedule, income is not enough to afford the ride, and information about the destination is lacking. According to family members in Lahore, the most important factor affecting the feasibility of travel for women is the availability of public areas where they can wait to board vehicles, such as bus stations. When immoral behaviour occurs in these areas, women are discouraged from using public transport and are sometimes forced to rely on their male companions. The second most important element is accessibility, which is more closely related to physical infrastructure, such as the connectivity of streets to the main bus network or any other means of transportation that connects to the main network. This accessibility is about women's safety when boarding and walking on the street or bus. Both technical and social factors that affect women's safety were considered. Discussing technical aspects such as the design of streets and public places is beyond the scope of the study, whereas social aspects such as sexual harassment on busses or while walking, the behavior of public transport drivers and problems with transport at certain times were found to discourage women from using public transport. In addition, the cost of public transport is reasonable for women. However, the physical costs, such as using stairs to get to the bus, outweigh the financial costs. Therefore, women use alternative modes of transport that are conveniently accessible and require little physical effort. Another aspect is convenience, which is very subjective and changes from generation to generation. For older women, seating is more important than for young girls, who need a separate area for women in public transport that offers them both safety and comfort. Based on the results, it can be proven that contrary to Singleton's theory, women's needs must be considered in public transportation and the use of public transportation does not affect women equally. The factors discovered in this study are so interdependent that it is difficult to analyse the impact of one component in isolation, and even its effect varies from person to person. Therefore, women's problems in using public transport have been shown to be highly contextual and complex.

## CHAPTER 7: RECOMMENDATIONS

The study of family member's perspective about women travel on public transport has listed several challenges that need to be addressed. Following are some ways forward that will help urban unit or other policy makers to address the women's issues on public transport in order to facilitate all the women equally to use public transportation for the betterment of the society (Malik, et al., 2020).

1. The results shows that female headed household are the frequent user of public transport and unavailability of other affordable options for them require state to improve the standards of public transport by detailed consumer surveys for the women particularly widow, divorced and having daughters.
2. The results revealed that physical infrastructure is also contributed to ensure women safety on the public spaces such as covered bus stop, seating arrangement for women, cameras etc. Therefore, it is important to conduct a study on determining the physical factors that contribute to provide safety for women.
3. The data demonstrate that driver behaviour has a negative influence on women's use of public transit, it is recommended that the Urban Unit do a comprehensive study on the drivers to understand difficulties about women experience and define ways to improve the situation.
4. Since women are taught to remain silent or ignore mishaps or sexual harassment incidents, there is a need to research an investigation method in which girls' names must be kept confidential.

## REFERENCES

- lindsay, S. & Lamptey, D.-L., 2019. Pedestrian navigation and public transit training interventions for youth with disabilities: a systematic review. *Disability and Rehabilitation*, 41(22), pp. 2607-2621.
- Nallari, R. & Griffith, B., 2011. *Gender and Macro Economic Policy*, Washington: The World Bank.
- Adeel, M., Anthony, Y. G. & Zheng, F., 2017. Gender inequality in mobility and mode choice in Pakistan. *Transportation*, Volume 44, p. 1519–1534 .
- Akyelken, N., 2020. Transport for women: who decides what women need?. In: s.l.:s.n.
- Allen, H. & Vanderschuren, M., 2016. *SAFE AND SOUND INTERNATIONAL RESEARCH ON WOMEN'S PERSONAL SAFETY ON PUBLIC TRANSPORT*, London: FIA Foundation.
- Amy , G. D. & Brook, S. S., 2013. Women-Only Transportation: How “Pink” Public Transportation Changes Public Perception of Women’s Mobility. *Journal of Public Transportation*,, 16(2), pp. 86-105.
- Anon., 2017. *Pakistan Bureau Statistics of Pakistan (Population Census)*. [Online] Available at: <https://www.pbs.gov.pk/content/population-census> [Accessed 31 08 2021].
- Arman, M. A., Khademi, N. & Lapparent, M. d., 2018. Women’s mode and trip structure choices in daily activity-travel: a developing country perspective. *Transportation Planning and Technology*, 41(8), pp. 1-33.
- Asian Development Bank, 2014. *PAK.Rapid Assessment of Sexual Harassment in Public Transport and Connected Spaces in Karachi*, s.l.: s.n.
- Barkan, S. E., 2020. Sociological Perspectives on the Family. In: *Social Problems: Continuity and Change*. s.l.:Saylor Foundation, p. 300.
- Barlés-Arizón, M. J., Fraj-Andrés, E. & Martínez-Salinas, E., 2013. Family Vacation Decision Making: The Role of Woman. In: s.l.:s.n.
- Basri, R., Khatun, T., Reza, M. S. & Khan, D. M. M. H., n.d. *Bangladesh Economic Association*. [Online] Available at: <https://bea-bd.org/site/images/pdf/029.pdf> [Accessed 26 08 2021].
- Batarce , M. et al., 2015. *Evaluation o f Passenger Comfort in Bus Rapid Transit System*, Felipe Herrera Library : Inter American Development Bank.
- Brispat, P., 2017. *Perception based decision-making*, Delft: TUDelft.
- Brooker , C., 2004. *The Seven Basic Plots: Why We Tell Stories*. first ed. s.l.:Bloomsbury Academic.
- deMadariga, I. S., 2013. *FROM WOMEN IN TRANSPORT TO GENDER IN TRANSPORT: CHALLENGING CONCEPTUAL FRAMEWORKS FOR IMPROVED POLICYMAKING*. s.l., Journal of International Affairs Editorial Board, pp. 43-65.
- Dunckel-Graglia, A. & Brook, S. S., 2013. Women-Only Transportation:How “Pink” Public Transportation Changes Public Perception of Women’s Mobility. *Journal of Public Transportation*, 16(2), pp. 86-105.
- Efron, R., 1969. What is Perception?. In: *Proceedings of the Boston Colloquium for the Philosophy of Science* . Dordrecht,Holland: Springer, Dordrecht, pp. 137-173.



- Granie, M.-. A., 2018. *Transportation, mobility and security: a matter of gender?*. [Online] Available at: <https://www.ifsttar.fr/en/online-resources/science-and-society/transport-and-mobility/science-topics/transportation-mobility-and-security-a-matter-of-gender/> [Accessed 28 June 2021].
- Green, M. C. & Brock, T. C., 2000. The role of transportation in the persuasiveness of public narratives.. *Journal of Personality and Social Psychology*, 11.79(5).
- Gupte, M., 2015. *The Role of 'Honor' in Violence against South Asian Women in the United State of America*, New Brunswick, NJ: Manavi, Inc. .
- Hail, Y. & McQuaid, R., 2021. The Concept of Fairness in Relation to Women Transport Users. *Sustainability*, 13(5), p. 2919.
- Hamilton, K., Jenkins, L., Hodgson, F. & Turner, J., 2005. *Promoting gender equality in Transport*, Manchester: Equal Opportunities Commission .
- ITF, 2018. *Women's Safety and Security: A Public Transport Priority*, pARIS: OECD Publishing.
- Jafree, S. R., 2020. *The Sociology of South Asian Women's Health*. 1 ed. Lahore: Springer.
- Jayachandran, S., 2021. *Social Norms as a Barrier to Women's Employment in Developing Countries\**, Evanston: NorthWestern University.
- Kerstetter , D., Bricker, K. & Gitelson, R., 1996. The Influence of a Spouse or P The Influence of a Spouse or Partner in T tner in Travel Decision-making el Decision-making. *Vision in Leisure and Business*, 15(2), pp. 40-44.
- Malik, B. Z., Rehman, Z. U., Khan, A. H. & Akram, W., 2020. Women's mobility via bus rapid transit: Experiential patterns and challenges in Lahore. *Journal of Transport and Health*, 17(100834).
- Minhans, A., Chatterjee , A. & Saurabh , P., 2020. Public perceptions: an important determinant of transport users' travel behaviour. *Human Geographies - Journal of Studies and Research in Human Geograph*, 14(175-197).
- Muñoz Boudet, A. M., Petesch, P., Turk, C. & Thumala, A., 2013. *On Norms and Agency\_ Conversations about Gender Equality with Women and Men in 20 Countries*, Washington: Direction in Development: Human Development\_ WorldBank.
- Omura, G. . S., Roberts, M. L. & Talarzyk, W. W., 1980. *An Exploratory Survey of Women's Travel Attitudes and Behavior: Directions For Research*. [Online] Available at: <https://www.acrwebsite.org/volumes/9744/volumes/v07/NA-07> [Accessed 29 06 2021].
- Pirra, M. et al., 2021. A Preliminary Analysis on Gender Aspects in Transport Systems and Mobility Services: Presentation of a Survey Design. *Sustainability*, Volume 13, p. 20.
- Rahman, M. U., 2010. Bus Service for 'Women Only' in Dhaka City: An Investigation. *Journal of Bangladesh Institute of Planners*, Volume 3, pp. 17-32.
- Singleton , P. A., 2015. *The Theor The Theory of Travel Decision-Making: A Conceptual el Decision-Making: A Conceptual Framework of Activ amework of Active Travel Beha el Behavior*. s.l.:TREC Friday Seminar Series.

Syed, J., Ali, F. & Winstanley, D., 2005. *In pursuit of modesty: contextual emotional labour and the dilemma for working women in Islamic societies*, s.l.: s.n.

The World Bank, 2006. *Gender and Transport Resource Guide*. [Online] Available at: <https://www.ssatp.org/sites/ssatp/files/publications/HTML/Gender-RG/module1/index.html> [Accessed 28 June 2021].

The World Bank, 2011. *Gender Assessment of Mumbai's Public Transport*, Mumbai: s.n.

The World Bank, 2018. *Female Headed Household (& of household with a female head)\_ Pakistan*. [Online] Available at: <https://data.worldbank.org/indicator/SP.HOU.FEMA.ZS?locations=PK> [Accessed 26 08 2021].

Thynell, M., 2017. *ROADS TO EQUAL ACCESS: THE ROLE OF TRANSPORT IN TRANSFORMING MOBILITY*. Thailand, United Nations ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC.

Uteng, T. P. & Turner, J., 2019. Addressing the Linkages between Gender and Transport in Low- and Middle-Income Countries. *Sustainability*, 11(4555), p. 34.

Vanier, C. & d'Arbois de Jubainville, H., 2017. Feeling unsafe in public transportation: A profile analysis of female users in the Parisian region. *Crime Prevention and Community Safety*, 9.19(3-4).

Wang, C. C. & Geale, S. K., 2015. The power of story: Narrative inquiry as a methodology in nursing research. *International Journal of Nursing Sciences*, 6.2(2).

Woodcock, A., Romer Christensen, H. & Levin, L., 2020. TlnnGO: Challenging Gender Inequality in Smart Mobility. *Put i saobraćaj*, 6.66(2).

World Health Organisation, 2002. *Gender and Road Traffic Injuries*, Geneva, Switzerland: World Health Organisation, Department of Gender and Women's Health.

World Health Organisation, 2018. The Meaning of "Sex": Using Title VII's Definition of Sex to Teach About the Legal Regulation of Business. *Journal of legal Studies Education*, 35(1), pp. 83-122.

Zolnik, E. J., Malik, A. & Irvin-Erickson, Y., 2018. Who benefits from bus rapid transit? Evidence from the Metro Bus System (MBS) in Lahore. *Journal of Transport and Geography*, Volume 71, pp. 139-149.

## APPENDIX A

### QUESTIONNAIRE: UNDERSTANDING OF FAMILY'S PERSPECTIVE ABOUT WOMEN'S TRAVELLING ON PUBLIC TRANSPORTATION

#### FOR GUARDIANS & BROTHERS

1. How often do you use Public transportation? Specify the mode
2. What is the purpose of using public transport?
3. Would you prefer to use that transport mode to travel with your wife/daughter/sister/mother?
  - a. If yes, why
  - b. If no, why
4. For which purpose is it required or allowed to travel for your sister/daughter/Wife?
5. What is the reason to be the guardian of female's traveling?
6. Can you share any personal experience about women's travel in public transportation?
7. Do you have any other experience that affect your wife/daughter/sister's travel on public transportation?

#### FOR FEMALES (SISTER, MOTHER, DAUGHTER, WIFE)

1. How often do you travel on public transportation? Specify the mode
2. Why do use public transportation?
3. Do you feel any problem with using public transportation?
4. What makes you feel safe for using public transportation?
5. Can you explain what your experience is to travel by yourself or with a male guardian?
7. What are the safety issues when you travel by yourself?
8. What are the challenges you face when traveling with a guardian?
9. What is the purpose of traveling with a guardian?