

Public Transport Policy Specifically for Women: Creating Gender-Responsive Transport Services

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Abstract. Public transport policy in terms of the distinction of transportation needs of women and men have significant differences. This research aims to provide description and confirmation concerning women's travel patterns who are mostly users of public transport vulnerable to violent acts and sexual harassment, threats of crime, and other criminal acts. The method used in this research is an academic literature survey relevant to public transport policy. Data is obtained from government documents and mass media, while primary data from observation. Data are analyzed based on the theory and concept of public policy on women's transportation and being interpreted. The research result shows that public transport without gender-responsive has been limited the access and public participation for marginalized groups, meanwhile, some operating women-only transport modes have a positive impact in reducing the attack of sexual harassment, fumbling and criminals act, but it still needs the infrastructure fulfillment and easier accessibility.

Keywords: public transport, gender equality, responsive policy

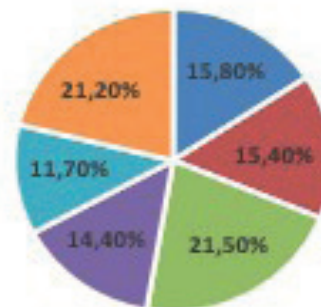
Introduction

The availability of a convenient, secure public transportation service is still difficult to find in many major cities in Indonesia. The results of Fitria (2018) survey on public transport in Indonesia to 6,904 respondents at the end of the year 2017 indicated the number of respondents who had experienced unpleasant events when using public transport reached 62.3%, while who had never experienced such events were 37.7%; and part of it was female passengers who had experienced verbal/ nonverbal sexual harassment reaching 14.4%.

The needs of female and male transportation have significant differences due to their different behavior of travel activities on transport patterns through comparison of interaction of social-demographic factors, journey timing patterns, and the selection of modes taken (Min Yang, et al., 2013).

Diagram 1 contains some unpleasant events that may occur when using offline transportation.

Inconvenience Criteria



Bad Attitude (15,80%), Never Been (15,40%), Bullied by Thug (21,50%), Have no experience in such events (14,40%), Left-behind items (11,70%), Other less unpleasant (21,20%)

Diagram 1. Survey on public transportation in Indonesia

Women who use public transport are prone to disruption, harassment, and even criminal acts. The results of the international

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Scale Survey show the city of Jakarta ranks 5th (fifth) as the most unsafe city for women who use the mode of public transport after Bogota, Mexico City, Lima, and Delhi with threat criteria of (1) Safe traveling at night (Safety at night); (2) Verbal harassment; (3) Physical abuse (physical harassment), (4) Wrong Community response (public response abuse); (5) Government confidence (confidence In authorities), and (5) City Security (safety in the city) (Survey Thomas Reuters Foundation 2017). The results of such surveys should be the material of government attention, urban planners, private and for women users of public transport to become more vigilant.

It is a challenge for the government to realize the secure public transport service with assurance for its users, responding to the scarcity of protection for women who travel by public transport. In today's modern era, government programs with dimensioning community service are required for quality. (Suparman, 2017) mentions that the prime public services which are easy, fast, precise, and safe marked by the simple procedure is expected by the service user community. The service is well-informed, responsive, accommodative, consistent, certainty (time, cost, law), and absolutely applies no unofficial levies. That is the implementation of the principle of excellent service in methods and procedures that are close to public policy.

Women and men have different patterns in spending their weekdays or holidays/weekends. They each have a variety of travel destinations based on these characteristics, including socio-economic and demographic factors (Morris, et al., 2010). But in the process of the journey, women are mostly users of "captive" public vehicles, where many suffered from the acts of violence and sexual harassment, threats of crime, and other criminal acts (Dunckel, et al., 2013; Loukaitou-Sideris & Fink, 2009; (Mack, 2009), Stanko, 1990; Morrell, 1996).

Acts of violence and sexual harassment suffered by women in their travels affecting their decision to switch transport mode from public transport to walking, riding bicycles, using private vehicles, and Taxi (Loukaitou-Sideris & Fink, 2009; Wekerle & Whitzman, 1995).

Public transport safety is still perceived as a big problem for women as users, especially for those living in major cities in the world. Jakarta is included in five large

groups of public transportation services that are the most unsafe for women. Empirical data indicates that in Indonesia, cases of crime and sexual harassment of women users of public transport are increasing annually. The Legal Aid Institute (LBH) states that cases of violence against women in public transport continue to increase. It refers to the number of reports reaching 166 justice seekers and 41 complaints about protection against women during the year 2017. The majority of the cases are sexual violence often occurs in the mode of transportation of electric Railway trains (KRL). The office of PT Kereta Api Indonesia (PT KAI) mentioned that it has made a breakthrough by providing female-only carriages, but apparently, women's harassment is still happening (LBH, 2017). The further impact is that, without safe transportation access, the chance of women to work in the urban areas will be smaller.

The research finding from Urban Mobility of Public Transport (UITP) states that security and safety issues are the most influential factors for women's mobility patterns. In some countries, the lack of some secure urban environment strongly restrict women's mobility and limit their access to job opportunities, education, and health care services.

Policies that are made to accommodate such conditions are by planning and implementing safe, secure, and convenient transportation especially improvement for facilities as well as creating female-friendly transportation in public area

Research Methodology

The study in this article uses a qualitative approach with the technique of surveying academic literature such as government documents, relevant textbooks, and research results and inferential in the field of public policy with the aim of obtaining concepts and theories relevant to the study of the policy and the provision of female-friendly public transport. The necessary data is obtained through searching various sources from the results of the study of women's transportation experts, the survey results of independent institutions, the research results of public policy academics, and writing resources from various media of both print and electronic which publish the events relating to public transportation services used by women. Thus, the data obtained belongs to the type of secondary data that is subsequently changed

into the form of narration as well as numbers according to the data display. In the next phase, data is being analyzed based on the concept of public policy on women's transport Dunckel (2013) and given the interpretation process.

Results and Discussion

Women's travel patterns differ from men. These differences relate to gender inequality in homes and workplaces, city environments, in the process of socialization interactions, and education levels. On the other hand, women and men use various transportation systems simultaneously. The literature review shows the same travel patterns for all women, whether they live in developed or developing countries, in big cities, suburbs, or rural areas. Wherever women's activities are more complex than men because of their "double duty". Women are more involved in household affairs by becoming caregivers of children and caring for sick family members and parents. As a result, women travel is more common to do outside the peak hours and brings out more goals than men, including in their travel to remote areas, not only in the city.

Many studies relate differences in travel patterns between women and men with the division of roles as head of the family and caretaker of the family. Apart from the increasing participation of women in the workforce in recent decades, the working patterns of women and men remain distinct. Women prefer to have part-time jobs and a separate workplace from men so that they can work diligently in different rooms. Another gender issue which can be a latent problem is the wage gap. It has been going on over the last few decades which, in many cases, befalls women as housekeepers and nurses of a family whose wages are far below the standard or even unpaid. Compared to men, women do more travel per day, but for a short distance. In the UK, for example, it is found that the distance traveled by males each day exceeds women with an average of 45%.

Women's travels are characterized by a series of journeys. The circuit of the trip is a series of segments of travel relay multiple routes and ends on the goal of the home to the workplace or vice versa. Travel chains are generally characterized in the literature as journeys that stop less than 30 minutes. (Mc. Guckin & Nakamoto. 2005). Crimes against women in North America and Europe are

more complex in their background, mainly due to their travel unrelated to work but rather related to the task of caring for their families. During that trip, they also need to go to other places, such as to health facilities, shopping areas, educational institutions (to escort children), parents' houses, and etc. In London, for example, 61% of the shopping trip and 71% of the trip to escort the children were made by women. At the same time, travel-related work is shorter because, generally, women live close to the workplace and the time constraints can reduce access to private cars (Mc.Guckin & Nakamoto, 2005)

Responding to the insecurity of using public transport, there is a new mode of transportation to support women activities (particularly those in the age of productive), either for school purpose, work, and others (Morris, 2010), which in turn will have macro implications on economic development and national productivity (Hyodo, et al., 2005), while at micro level influence the woman herself and her surroundings (Loukaitou-Sideris & Fink, 2009).

(Hyodo et al., 2005) explain that transport demand is influenced by many factors, such as the availability of facilities, levels of motor vehicle usage, economic growth, and local culture. It is concerned to analyze the relationship between these factors to see the present condition and forecasting transportation in the future. One of the best methods is to compare internationally from actual travel and economic demand data.

In this article, data is taken from 13 cities of 12 countries worldwide being researched, namely Tripoli (Libya), Phnom Penh (Cambodia), Damascus (Syria), Manila (Philippines), Cheng Du (China), Managua (Nicaragua), Belem (Brazil), Bucharest (Romania), Cairo (Egypt), Jakarta (Indonesia), Kuala Lumpur (Malaysia), Tokyo and Hiroshima (Japan), with funding sponsorship from JICA, Japan.

This article explores the comparative characteristics of travel between women and men with some possible determinants of existing travel requests. The variables being analyzed are age, gender, vehicle ownership vs variable of travel characteristics, such as travel destination, capital use, number of daily trips, time of arrival, and the average length of travel.

Analysis is made for each of the 13 cities by comparing them all. Similarities

and variations between these cities can be identified by different travel patterns between women and men, including the development of infrastructure and means of transport, levels of motor vehicle use, demographics, and local culture.

From the formed pattern, it can be seen that there are differences in travel patterns between women and men. The more advanced a city, the pattern of travel between women and men tend to be similar or equal. In contrast, the growing city has a very significant difference between women and men in travel patterns, i.e. women have a very wide radial travel pattern, while men have travel narrow patterns.

The data analysis results show illustrations of the development process of cities around the world. The differences and equations of these transport patterns emerge as a result of the transportation policies implemented in each State studied. However, this article is not conducted in the study of the level of Service (LoS) of transportation users in its travel behaviour.

(Yang et al., 2013) state that the behavior of different travel activities between women and men also distinguishes the use of transportation modes. Through a comparative survey of interactions regarding the influence of social-demographic factors, travel time patterns, and choice of modes, the result shows there is a significant gender-based of transportation, meaning that women have more specific travel patterns than men.

In a survey conducted in the city of Suzhou, China, it was known that women prefer cycling for closer distances and public transport. While men prefer to use private vehicles. However, this condition is not significant for travel patterns. Generally, the choice of transport mode by women is easier than men.

Unfortunately, using public transport means women are exposed to harassment/sexual harassment and acts of violence from men. There are cases of women who fear to use public transport in certain regions and at certain times. Although in statistics, women who use public transport in the city of Suzhou have higher education and do travel for work.

Policies made to accommodate such conditions are by planning and implementing safe, secure, and convenient transportation, especially improvement for bicycle lanes and facilities as well as creating female-friendly

bicycles as a mode of transportation in Suzhou. Meanwhile, the Chinese government also seeks to reform public transport especially for transit areas (transfer modes, stations, terminals, and stops) by providing adequate lighting and safe facilities close to the Security Agency (security guard postal). It also encourages the use of public transport for male residents who often use personal vehicles for their travel needs.

In (Dunckel-Graglia, 2013), currently, violence against women on the go and in public transport is very high. This results in the effect of excessive fear of women to use public transportation. Koskela and Pain (2000) provide a logical proposal related to female mobility by changing the physical design of the public transport system to better ensure the safety of travel for women in response to the issue of gender equality in transportation.

The psychological condition of women who fear to use public transport affects them to switch mode to private vehicles or taxis that are considered to be more secure for their mobility. Violence against women in public transport is so high in Mexico causing the Mexico government to create a women-only transport policy with a pink physical design as a solution to reduce gender discrimination in urban mobility. It is hoped that women who are productive in Mexico City are switching to use "pink transportation" for their mobility needs that provide security, safety, and comfort assurance.

In Melbourne, Australia, women, and men have different travel patterns, whether on weekdays or on holidays/weekends. They have a variety of destinations and travel modes based on social demographic characteristics (Morris, 2010)

This paper has stated there is a strong tendency for women to use public transport on their journey to work. However, to fulfill the needs of outside work, especially the needs of families and households such as taking children to schools, businesses, shopping, and other activities, women prefer to use a more flexible mode of transport i.e. private vehicles. Although there is a current shift in the use of public transportation, women's travel patterns with private vehicles in Melbourne are still dominant, especially for women of productive age, let alone those who work part-time, run a business and do service to the community.

Social, economic, and demographic characteristics are very dominant in deciding

which mode of transportation to use to fulfill the needs of these women. Such characteristics aforementioned are a lifestyle, occupation, customs/culture, family's economic conditions, and residential characters of Melbourne's urban area. Those have implications in the pattern and forecasting of travel demand and development of transportation planning policy that can facilitate this condition.

The conditions of transportation in California, USA, are threatening the safety of women who travel (Loukaitou-Sideris & Fink, 2009). Therefore, women are afraid that crimes will occur to them when they are in public spaces and public transport. They need security and safety and it should be the consideration of the government to provide public transportation that can guarantee it.

This study shows there is a significant inconsistency between the need for travel safety for women with the desire, type, and strategic location of transit agents/public transport operators. Wekerle & Whitzman (1995) find a negative perception about the safety and safety of public transport passengers in New York, Toronto, and London.

At the turn of the XX century, the Hudson and Manhattan roads, which served routes between New York and Jersey City, would be instituted by the female-only transport system (Schulz dan Gilbert, 1996). When using public transport, women are afraid of sexual violence that may be committed by men, such as intimidation, fumbling, sexual commentary, harassment, threats, and other criminal acts committed in public spaces, including in bus and rail transportation (Stanko, 1990; Morrell, 1996).

Women become more often riding bicycles, private cars, and taxis than public transport for their own safety (Wekerle & Whitzman, 1995; Stanko, 1990). Women also tend to restrict the use of public transport at certain hours, unless accompanied by their girlfriends, spouses, and families (Atkins, 1989; Ross, 2010).

Problems and Solutions

Among the reasons why respondents refuse to use public transport are punctuality problems, inefficient public transport services, and expensive fares. Beirao and Cabral (2007) conducted a qualitative study on public transport and car users in order to understand the attitude of travelers towards transport and to explore the perception of public transport

service quality. They found that the increasing public transport usage necessities demanded the service that was designed in such a way to accommodate the service levels required by customers in order to attract potential users. One of the main obstacles in the planning and development of transportation that suits the needs of women's safety and comfort and to realize the female-friendly public transport is the lack of quantitative and qualitative statistics data on the results of surveys and studies that have been made in various countries.

Women's travel patterns are influenced not only by the role of women in modern society as housewives and women workers, but also by physical, environmental, or technological barriers that block access to public transport. Studies in some countries have identified some barriers that complicate the circumstances of this travel pattern, such as:

Barriers Associated with Providing Infrastructure Support.

Infrastructure barriers in and around the station, such as stairs or several types of floors at the stop or railway platforms that impede mobility for people on foot and children reduce accessibility to buses or train that caters for commuters.

The public transport authority in London examines the experience of traveling by bus. The goal is to provide information and training to companies that operate bus lines and to incorporate what has been studied in the planning of the bus itself. As part of the project, a documentary produced shows how women negotiate with the railway station authorities which clearly indicate that the public transport infrastructure cannot be accessed easily as excess from lack of socialization of technical instructions.

Some cities and countries start looking for solutions to handle these physical barriers. In London, for example, low-level buses begin to be used to allow access to people in wheelchairs or special trains for people with disabilities.

Barriers to Information

The available information must be clear and reliable in a variety of languages about schedules, frequencies, tariffs, routes, connections, and security. Since the majority of passengers are women and their travel is

more complex which often involving some pathways or even changing to different modes of transport, the availability of such information is crucial.

Gender inequality in the use of public transport opened a lot of follow-up problems. For women, this includes a fear of being victims of criminal acts in public transport that can happen in an urban environment that is not gender-neutral. Urban architects and designers are increasingly striving to understand how gender-sensitive design can combat the spatial injustice faced by women and girls from all demographics, races, and socio-economic groups. Public spaces and public transport modes, for example, have raised many systemic problems.

The difference that can be observed on how men and women traveling around the city can be attributed to a hierarchy of gender power embedded in our society. The research results by the University of California show that a long history of gender inequality reinforces the rigid definition and perception of femininity and masculinity. Women have extra responsibility and role in the household. When they have things to do outside the house, they have fewer transportation options. This affects their travel patterns. Women are more likely to have many destinations during their daily commute.

The conditions of transportation in major cities in Indonesia, especially the capital city of Jakarta, and some other countries are not much different in the absence of safety guarantees and safety for women. The fear of women to use public transport should be a consideration for the government to provide a way out through a design of a safe and female-friendly public transportation system, monitor its implementation, and held periodic evaluation, formulate a regulation related to public transportation that understands women's travel patterns that differ from male users, comparative social demographic interactions, travel time settings, and options of transportation. Having a role of a regulator in organizing the sustainability of the national transportation system and given the importance of the transport role in sustainable development, the Indonesian Ministry of Transportation (2010) confirms that gender discrimination in the transportation sector will result in access gaps, participation, control, and benefits in the development process.

Women have various concerns about the safety of themselves than men, and it is

certainly important to design personal safety in any form to be able to run work activities and other social functions. The users of public transport are generally predominantly male, and at the same time, female users feel less comfortable with the crowded and it is hard to get a seat. Gender inequality in the use of transport opened a lot of additional problems. For women, this includes disproportionate fears of being crime victims in the public transport space.

Gender issues are increasingly strengthened by the reason that women are not only threatened when using public transport but also in public spaces in general, especially at night and in places vulnerable to crimes which are not yet equipped with surveillance cameras. It is necessary for the community including gender observers to speak up and urge the government through the law enforcement to give sanctions to those who commit crimes against women and provide mentoring and advocacy laws for women of violence/crime victims in public transport. The interesting statement comes from Enrique Peñalosa Londoño, former mayor of Bogotá, saying, "*Transport is not a technical, but a political issue*". The condition of a city or state transportation system reflects the political will and perspective of its government. As long as the government has the political will, the limitation of resources will not be a barrier to realizing a good and inclusive transportation system. This has been proved by Bogotá City and Curitiba city located in the developing world with all its limitations, similar to Indonesia.

Conclusions

Public transportation that is not responsive to the demands of gender equality will have a significant impact on limited access, participation, benefits, and community control in development. Studies through interviews and observations show that policies, management, and infrastructure that do not favor marginalized groups are a cause of gender discrimination in public transportation. The female-only public transport answered the need for gender-responsive transportation, conceptually characterized by the need for transportation with male users with significant differences in transportation patterns, travel time settings, and the selection of modes taken.

Based on several interviews to women

as public transport user, they are afraid to use public transport since there are cases of sexual violence committed by men such as intimidation, fumbling, sexual harassment, threats and other criminal acts occurring in public spaces, including in bus and rail transportation, which make them decide to use other modes of transport. The report of the survey on cities prone to crime and harassment of women i.e Bogota, Mexico City, Lima, India, and including Jakarta, is quite a reason to pay attention to the response to this problem.

Indeed, women have different safety needs when traveling by public transportation, thus, it is important for the government to formulate the design of planning and implementation of convenient transportation services and by applying gender and social equality indicators. The availability of the female-friendly modes of public transportation has positive impacts on reducing harassment and crime. However, it stills requires the improvement of infrastructure and easy access for users.

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