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Research paper

The Needs of Street Furniture in the Pedestrian on Urip Sumoharjo Yogyakarta Street

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Abstract

The background of the pedestrian in Urip Sumoharjo Yogyakarta street which conditions are not comfortable for pedestrians to pass, so as to improve the comfort of the pedestrian, in this study try to understand street furniture needed for pedestrian comfort in pedestrians on Urip Sumoharjo Yogyakarta street. Data was collected using a survey method with a questionnaire containing closed questions. The data analysis technique used in this research is quantitative descriptive data analysis. Based on the results of the study showed that men prefer to walk than women, the time when people decide to walk most choose when they go to exercise, the distance traveled by people when deciding to walk is 300-600 meters, street furniture is very much needed for pedestrian comfort in the pedestrian on Urip Sumoharjo Yogyakarta street are street lights, bins, seating, and public toilets. While pedestrians are needed enough are traffic signs, shelters, bollards, and road guardrail. Pedestrians need less is flower pots, fountains and warnings, and waste containers.

Keywords: *Public Perception; Street Furniture; Pedestrian.*

1. Introduction

Walking at this time is not a habit of the community to travel somewhere. They prefer to use private vehicles or public transport, with the reason that they get to their destination faster, are not tiring, are not exposed to heat, are not exposed to rain, are not afraid of splashing water, not jostling with street vendors, they don't even have to worried about being hit by a motorized vehicle that violates the rules. This situation is experienced by many people living in big cities, and is the main reason they are reluctant to walk when heading to a place [1]. The term pedestrian or a pedestrian comes from Greece pedester/pedestris i.e. people who walk or promenade. Pedestrian also comes from the word pedos Greece language which means the foot so, that the pedestrian can be interpreted as pedestrians or people who walk. Pedestrian are also interpreted as movement or circulation or transfer of a person or people from one place to the point of origin (origin) to another place as a destination on foot by [2]. A good pedestrian reduce dependence against the vehicles at city walk, reproduce, improve the quality of the environment, enhance human interaction, grow commerce activity, and ultimately improve the quality of the air in the City Centre by [3]. So, we can conclude and agree on the intended tool is a tool not a motor vehicle. Pedestrian pathway is a pathway that accommodates human movement activities from one place to another place on foot, using a wheelchair, skates, skate boards, scooters, bikes and also. Special bike lanes on its application divided by pedestrian pathways, however, cyclists are still classed with the pedestrian. Exist in the form of pedestrian trails sidewalks, bike paths and lanes specifically persons with disability [1]. A good pedestrian path must be able to accommodate every pedestrian activity smoothly and safely. This requirement needs to be considered in the design of the pedestrian path. In order to provide pedestrian pathways that can accommodate the needs of these activities, the designer needs to know the pedestrian travel categories and the types of nodes that are available and attractive to pedestrians. The pedestrian pathway as a city space unit is designed to be divided and become very dependent on the needs of the road as a means of circulation [4]. Street Furniture or street furniture/garden furniture which is vital for the continuity of activities in the street or garden. The furniture is the street lights, traffic signs, bins, shelters, seating, flower pots, fountains and warnings, bollards, public toilets, waste containers and road guardrails by [5]. The design and structuring of street furniture will form the impression of a place and support the identity of the area. According to [6], street furniture is an object or equipment that is installed along the road, in tourism is a complementary element in a tourist area. Street furniture if managed properly will create a beautiful impression when visiting a tourist destination [7]. The city of Yogyakarta as healthy and comfortable city with the management of an adequate public service facilities, as a major theme within management or Setup starts from small parts of the city. Yogyakarta city is the center of economic activities, industry, trade, education and culture and tourism. Urip Sumoharjo Yogyakarta street is one of the shopping centers and city centers that are crowded with visitors, both visitors from local communities and visitors from outside the area [8]. On the Urip Sumoharjo, the development process is based on considerations of the distribution of concentration of shopping center in Yogyakarta besides Malioboro, because in 1978 the Government of Yogyakarta special region want to reduce density on Malioboro Street.

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Fig. 1: Map of Urip Sumoharjo Yogyakarta street location from STA 03 + 100 up to STA 03 + 585, Yogyakarta

Since the year 1978, Urip Sumoharjo Yogyakarta street developed into a trading center which accommodates the needs of the community, especially the surrounding communities by providing a wide range of community needs, the needs of the place shopping, dining, recreation and others. In accordance with the urban element theory expressed by [3], a city will be formed because there are several elements, including the shape and mass of the building, circulation and parking and pedestrian ways. So that the pedestrian pathway is an important element of urban design, which forms the relationship between activities in a location, which is a sub-system of linkage of a city's road network. Pedestrian paths will be increasingly important if pedestrians are able to act as the main user of the route, not motorized vehicles or other things, so that the main function of the pedestrian path can be achieved, namely the creation of beauty and comfort of an area [9]. Urip Sumoharjo Yogyakarta street that functions as a trading area, offices, services and education, it contained elements of street furniture in favor of convenience for pedestrians. But the path of pedestrian in the area of commercial buildings on Urip Sumoharjo Yogyakarta street not working properly, pedestrian is widely used for selling and parking so pedestrian behavior not only leads to a pedestrian path but also on the shoulder of the road.



Fig. 2: Pedestrian on Urip Sumoharjo Yogyakarta street is used as a place to sell



Fig. 3: Pedestrian on Urip Sumoharjo Yogyakarta street used as motorcycle parking

Background of the pedestrian on Urip Sumoharjo Yogyakarta street the conditions less comfortable for traversed by pedestrians, so to increase comfort on the pedestrian lanes in this research seeks to understand the street furniture required for the convenience of hikers in the pedestrian on Urip Sumoharjo Yogyakarta street. The purpose of this research is to know the perceptions of the public about the needs of street furniture in the pedestrian on Urip Sumoharjo Yogyakarta street. The results of this research are generally expected to be input to the development of the science of Urban Design, architecture and psychology in particular is practically can be used as guidelines in the planning and design of a city and its surrounding environment will the importance of the presence of street furniture, pedestrian pathways that are able to meet the needs the comfort of users especially in the city of Yogyakarta as well as provide input to determining policies, in that it is the Government of Yogyakarta city deals with the policy of urban planning related provision and arrangement of supporting facilities especially the existence of street furniture line pedestrians up to meet the needs of the convenience of the users as the public spaces of the city.

2. Methodology

The data was collected using a survey method with a questionnaire containing closed questions. The sample selection uses a non-random sampling method that uses accidental sampling by [10]. Data were taken from 60 respondents who filled out questionnaires. Data analysis techniques used in this research is descriptive quantitative data analysis, where data have been obtained through questionnaires and observations in the field, all of the collected information, studied to become a unity intact. According to [11], Quantitative Descriptive Research i.e. analysis attempt to provide a clear and detailed picture based on a reality that is found in the field through the results of the questionnaire and the dissemination of the questionnaire later in the attraction of a conclusion.

3. Results and Discussion

One that influences the typical appearance of a city is by giving a touch to street furniture or street furniture or road equipment, for example, which is characterized local culture by [12], meaning the placement of supporting elements in public spaces or roads that will strengthen character in an area that has a greater impact. Of course, street furniture must be harmonious and form harmonization with road elements and other supporting elements of the city [13]. To avoid inconsistencies in the environment, irregularities in the face of the city by [14], and environmental incompatibility. Some forms of street furniture are street lights, traffic signs, bins, shelters, seating, flower pots, fountains and warnings, bollards, public toilets, waste containers and road guardrails by [5].

3.1. Characteristics of Respondents

Respondents consisted of 38 female respondents and 22 male respondents, with a total number of 60 respondents. The youngest respondents aged 14 years old and the oldest respondents age 60 years. The average age of respondents that is 35 years old.

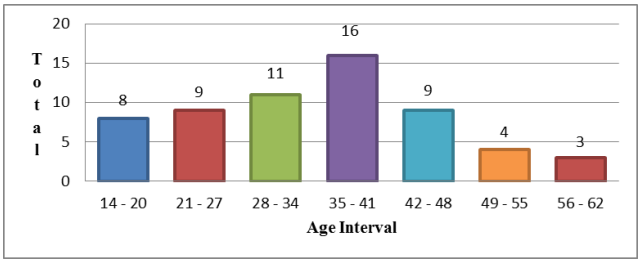

Fig. 4: Age characteristics of respondents

Respondents who were involved from among employees of private i.e. totaling 16 people and students totaling 15 people and self-employment totaled 12 people, and the rest is another profession.

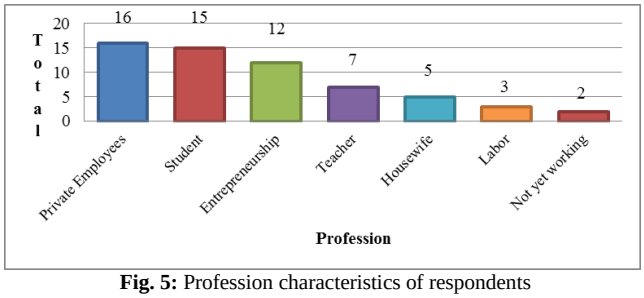

Fig. 5: Profession characteristics of respondents

By looking at the purpose of collecting data on this research, from data already collected according to the characteristics of the respondents expected that is the age of respondents varies among school age and are already working. Before analyze and explaining details about the needs of street furniture on the pedestrian on Urip Sumoharjo Yogyakarta street. There are a few things you need to know in order to strengthen the community's views or the respondent to the needs of street furniture, including; whether the respondents liked the walk?, then when they decided to walk away?, then how far away?. Based on the results of the analysis in the know that 41 people say like foot and 11 people say don't like to walk away. Then the answer is sometimes as many as 6 people and the answer depends on the mood of 2 people. When compared on the basis of gender and fondness by foot, male respondents have 95.45% percentage that like to walk while not like 4.55%. Unlike the respondent women who like walk of 52.63%, 26.32% who don't like, sometimes 15.79%, and depending on the mood of 5.26%. This shows that the interest of the respondent's women to walk away is lower than male respondents. Then from the data collected it is known that the respondent decided to walk in when they go work out numbering 22 people, go to the school/College/Office totaled 12 people, go to the places of worship amounts to 10 people, visit relatives/neighbors amounted to 7 people, go to the supermarket/shop totaling 7 people and go on vacation amounts to two people.

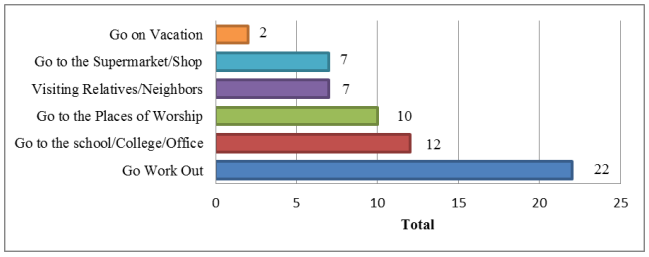

Fig. 6: When did the respondent decide to walk

The respondent decided to walk to a places also for distance considerations. Most of the respondents answered the preferred foot when walking at a distance of between 200-600 meters, the amount of the percentage 54%, amounting to less than 200 meters the percentage of 25%, the distance between 600-1000 meters the percentage is 18%, more than 1 kilometer distance percentage is 3%.

3.2. Recapitulation of Public Perception about the Needs of Street Furniture in the Pedestrian on Urip Sumoharjo Yogyakarta Street Yogyakarta

3.2.1. Street Lights

The respondent's response to the needs of street lights, most of the respondents said it is very needed (76.7%) with a score of 226 value. As public facilities, street lights could be said a lot that is not yet available, when as for less complete and less good maintenance. The function of the street lamp is for street lighting, and to lower the number of accidents as well as giving the security of road users.

3.2.2. Traffic Signs

The respondent's response to the needs of traffic signs, most of the respondents said quite needed (58.3%) with a score of 201 value. Based on observations especially on the pedestrian on Urip Sumoharjo Yogyakarta street, signs are readily available but less precise position because many are covered by trees, so that it may cause confusion for users. For that reason, it needs to be placed signs with the right position and is not obstructed by any objects.

3.2.3. Bins

The respondent's response to the needs of bins, most of the respondents said it is very needed (71.7%) with a score of 218 value. In the pedestrian on Urip Sumoharjo Yogyakarta street there are already many bins. The trash needed so that pedestrians do not carelessly throw garbage. The form of bins can be designed with an interesting shape can be defined with shapes, colors, patterns, and designs with ease to dispose of garbage, in addition to supporting its functions, also contribute contribution in beautify the look of the face the city.

3.2.4. Shelter

The respondent's response to the needs of shelter, the majority of respondents said quite needed (53.3%) with a score value of 186. The bus stop is the place to raise and lower the passengers of the bus, its placement should be in place, near the left side of the road, are temporary, with the standard size of the bus stops, the goal does not make the jammed area. Urip Sumoharjo on the road there is only 1 bus stop Trans Jogja which is located on the South side of the road. With only 1 bus stop is felt very lacking when viewed pedestrian on Urip Sumoharjo Yogyakarta street is a pretty solid commercial district.

3.2.5. Seating

The respondent's response to the needs of seating, most of the respondents said it is very needed (63.3%) with a score value of 217. With the function as a place of sitting, indispensable for pedestrians who want to enjoy the atmosphere of Urip Sumoharjo Yogyakarta street. In the pedestrian on Urip Sumoharjo Yogyakarta streets there is no seating, but much needed seating to relax and rest a moment for pedestrians, so hopefully there is a seat with a standard 100 meter walking should be there is seating.

3.2.6. Flower Pot

The respondent's response to the needs of flower pots, most respondents stated less needed (51.7%) with a score of 155 value. As container plants, placement of flower pots and tubs of flowers both as container plants can be as decorations and make the area into a beautiful. But the existence of the flower pots according to respondents less needed for pedestrians because they assume the existence of a flower pot can reduce the space to walk.

3.2.7. Fountains and Warnings

The respondent's response to the needs of the fountains and warnings, most respondents stated less needed (56.7%) with a score value of 154. To dampen the atmosphere is hot on the pedestrian, actually required elements of landscape elements, namely by providing water fountains and landmarks as a sign of the existence of the site.

3.2.8. Bollards

The respondent's response to the needs of bollards, most respondents expressed quite needed (66.7%) with a score value of 158. As

delimiters for pedestrians and vehicles, the bollards is indispensable, in Urip Sumoharjo Yogyakarta street as a dividing line is with elevating peil height of land, giving a limit, but his condition is still can be traversed by vehicles, so the delimiter works only in certain places with different levels/height.

3.2.9. Road Guardrails

The respondent's response to the needs of road guardrails, most respondents expressed quite needed (55%) with a score value of 187. The fence as a limiting way is needed to give a sense of security for pedestrians, because on the highway man dealing with other human beings and a variety of vehicles.

3.2.10. Public Toilet

The respondent's response to the needs of public toilets, the majority of respondents said badly needed (55%) with a score of 206 value. To maintain the beauty of the city and eliminate impression slouchy, need to be provided with public toilets so that the communities that are in public places does not channel it across the places. In the pedestrian on Urip Sumoharjo Yogyakarta street is not yet available for public toilets.

3.2.11. Waste Containers

The respondent's response to the needs of the waste containers, the majority of respondents stated less needed (56.7%) with a score value of 157. Respondents considered that to dump the dirt just need to throw it in the trash and waste containers presence if not in the manage well will give rise to a sense of less comfortable for pedestrians caused by odors arising from waste containers such.

4. Conclusion

The results of the study showed that men prefer to walk than women, the time when people decide to walk most choose when they go to exercise, the distance traveled by people when deciding to walk is 300-600 meters. Based on the data obtained, showed that street furniture is very much needed for pedestrian comfort in the pedestrian on Urip Sumoharjo Yogyakarta street are street lights, bins, seating, and public toilets. While pedestrians are needed enough are traffic signs, shelters, bollards, and road guardrail. Pedestrians need less is flower pots, fountains and warnings, and waste containers. By paying attention and providing street furniture as an important factor, its existence has an impact on road users that relate to aspects of comfort in interacting in public spaces, relaxed seating, proper lighting, protection, public roads become smooth, due to information in the form of notice signpost direction, and make the area environment more useful, comfortable and fun.

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