Study Utility Vehicle Makassar City Transport a High-Ergonomics

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ABSTRACT
The development of technology during this was to meet the man, but it should be men must be spoilt, But if it turns out that all that did not make people feel safe, comfortable, healthy and easy, but the planning process, decision-making and developments have experienced a deviation orientation. Public transport Transportation in the Makassar city should be made with implementing aspects promotes ergonomic comfort, but it does not apply in means of transportation to the public. Issues for public vehicles on access up and down not in accordance with The aim of the research vehicle users, is to phrases dimensions body which have an effect on to utility vehicle, to examine the public vehicles that high-promotes ergonomic comfort. The method assessment is the measurement dimensions body to the passengers as well as the use questionnaires and analyzed in a holistic approach ergonomics. Results of research high security tools to public vehicles that high-security vehicle users generally by body dimensions as a powerful than Knee-and-a-half was knee, long your feet, and your elbow kelantai. While utilities yangbernilai ergonomics was the first and second around 24.76 cm and 49.53 cm, wide around 24.25 cm and was hangar 104, 78 cm.

Keywords - anthropometry, ergonomics, utility vehicle.

I. INTRODUCTION
Transportation means Public Transport in Makassar City should be made with implementing aspects promotes ergonomic comfort, but it does not apply in means of transportation to the public. The Awards for human values in general appears to be still second position after the economical. So that in many things were still many found in humanity does not serve as a reference point is important in the process designed to build.

The problems that are in this research is about public vehicles that are in the Makassar city. The initial research first problem security on public vehicles on access up and down than 36 cm to 43 cm, 16 cm wide steps up to 22 cm and was in rows 22 cm to 36 cm, while than hangar doors 124 cm up to 139 cm, the distance between the road to the stairs high enough so that body posture passengers who have a smaller will have difficulty was limited ability of man.

In a study or that you want to achieve is a tool public vehicles public transport vehicles to be safe and convenient to use methods keergonomian. While in high formulation of problems then, or 1. To examine dimensions body body as a powerful tool for security vehicles. 2. To examine the public vehicles that high-promotes ergonomic comfort.

II. LITERATURE REVIEW
2.1 Strategic Issues facilities and Infrastructure
Public transport system essentially hardware was formed from a group (hardware) page which consists of infrastructure and systems. Next facility hardware components second was operated with the system software operations or system which consists of these components such as: frequency and tariffs. Component of infrastructure and transportation general itself, among others, public transport infrastructure component, which covers, the system network of routes, the terminal, track along the right of way from each route, bus stops. Components means angutan general, on. Types of vehicles that used and the dimension and design vehicles (that Dedi's, S).

2.2 Ergonomic Principles utility vehicle
The main objective man to make changes design all the equipment is to make it easier for operational and put on its usage. Discipline scholarly was born and evolved around 20th century this related to design equipment and facilities that implementing the human aspects as pemakaianya known then with the name Ergonomics.

The application ergonomics in general is hostile activities (design) or re-design (redesain). This may be on hardware items such as work (benches),

platform, the seats are, the position means safety, management control system, teaching aids, road/tunnel, the doors, windows, etc. are still in the matter is a detailed engineering discussion menegenai working environment, because if the system hardware as it will change in the workplace.

III. RESEARCH METHOD

Research was done in the Makassar City in terms of utility vehicle is not optimal in public vehicles. Population and samples or is users public transportation, the vehicle tools for school children, the students, officials and private and public transport passengers. Data collection done directly to the comfort and security in public vehicles especially in the access up and down, was household, wide domestic workers, was in rows and was hangar doors.

After data, then continued with the trial statistics
- The trial uniformity data said uniform when data is between border controls and the borders As Under control by using a confidence level of 95 percent and high precision 5 percent.
- Adequacy Test data, it would be useful to know enough data or not with conditions \( N' < N \), with a confidence level of 95 percent and high precision 5 percent.
- 5th percentile test-th, 50-year and 95-years old, it would be useful to get the dimension body in accordance with the value ergonomics.

IV. RESULTS AND DISCUSSION

4.1 Results of research

To obtain anthropometric measurement that promotes ergonomic comfort and body dimensions as a powerful tool to vehicles: than Knee (TL) and (1/2 TL) measured from knee to kelantai for than ladder 1 and 2 feet long. (Currently PKT has served ship necessity in) is measured from heel to toe the ends, and square kelantai (TUE) measured from hangar to the floor, then counted with test statistics. trial uniformity data used a confidence level of 95 percent and high precision 5 percentil, data uniform and testing adequacy test data, \( N' < N \) reflect data is enough.

Testing persertil used percentile 5th, 50 year and 95-years old. As can be seen in table 3 below:

Table 1 . Test resultth percentile anthropometry.

<table>
<thead>
<tr>
<th>No.</th>
<th>Dimension The body</th>
<th>The promotes ergonomic comfort, Anthropometric (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>5-Th</td>
</tr>
<tr>
<td>1</td>
<td>Elbow to the floor</td>
<td>97.66</td>
</tr>
<tr>
<td>2</td>
<td>High knee</td>
<td>45.47</td>
</tr>
<tr>
<td>3</td>
<td>-And-a-half was knee</td>
<td>22.74</td>
</tr>
<tr>
<td>4</td>
<td>Long-term your feet</td>
<td>22.75</td>
</tr>
</tbody>
</table>
2. High security tools public vehicles that high-promotes ergonomic comfort to the security vehicle users generally, was the first and second around 24.76 cm and 49.53 cm, wide around 24.25 cm and was hangar 104.78 cm.

5.2 Today's Question and
1. Should public vehicles that are in the Makassar City to have attention, where many vehicles that are not appropriate in keergonomian.

References
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