

Conference Paper

## Travel Pattern and Relaxation Activities Preference of the Visitors in Lego-Lego Makassar

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### ABSTRACT

The analysis concept of transportation demand is using the trip and activity-based approach. Transportation planning is not only concerned about the trip demand of the commuters but also non-commuters such as leisure trips. Lego-Lego is one of the famous relaxation activity places in Makassar that support leisure trips. Lego-Lego is the only multipurpose relaxation facility provided by the government. Numerous people are visiting the Lego-Lego, especially in the weekend in the morning and afternoon. The long line of vehicles is often at the entrance and exit way of Lego-Lego due to the increase of visitors. The high demand to the place is important to overview the pattern of activities while use the facilities for expanding and developing the tourist area and reduce the traffic problems. According to the trip pattern and activities of visitors, this study aims to describes the visitors background, trip pattern and activities of people at Lego-Lego. This study used descriptive analysis and 1218 of total respondents. The result showed that the trip pattern of visitors using facilities as much as 88 patterns in the morning and 77 in the noon. Majority respondent's pattern is "parking – rest area – parking" or about 17.08% in the morning and "parking – courtyard – rest area – parking" or about 13.87% in the noon. The trip pattern using facilities for morning and noon are quite different and low correlation. Hence, the correlation value shown 0,427 with not significantly affected the trip pattern and time period activities. In addition, the facilities with the most used were rest area and courtyard.

*Keywords: Trip, pattern, relaxation, lego-lego*

### Introduction

The global impact of the COVID-19 pandemic has affected the world tourism industry (Hamarneh & Steiner, 2001). A series of measures were taken to restrict travel and social activities outside the home to reduce the spread. The impact of the restrictions on purpose trips drastically affects the people's lives in the other ways for example huge financial losses and the disruption of their education or career (Teresa et al., 2018). The government of South Sulawesi has been encouraging the economic situation by opening one the relaxation facilities namely Lego-Lego. It is located at the Central Point of Indonesia (CPI) the tourism area. Lego-Lego means terrace as the local language with multi-purpose facilities inside. Since its opening in August 2020, numerous visitors come to visit and spend their time relaxing activities. As the multipurpose relaxation facilities, Lego-Lego provided a food court, courtyard, playground, rest area, and sports center. These multipurpose facilities attracted visitors to visit.

Lately, the number of visitors from local has risen over the last year. As reported from the official website of the government, Lego-Lego facilities and tenant is free of charge and became one of the reasons for visitors to visit (Wasilah & Andi, 2019). The tenant space is provided for the entrepreneur with register first to apply space. People are come around and using the facilities such as the food court, courtyard, playground, rest area, and sports center. The total number of

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visitors is increasing almost weekend, especially in a certain spot of facilities that caused planning for the expansion area closely to Lego-Lego. On the other hand, the expansion will attract people to come over and potentially congestion in the entranceway.

This is further strengthened as the only one of the multipurpose relaxation facilities in the city. Lego-Lego is considered one strategy of the government to recover from the financial problems during the pandemic with attracted numerous visitors. Lego-Lego was first planned as a food court that has free-of-charge tenants to solve the culinary entrepreneur that faces fewer customers (Nur, 2015). The government not only provided the food court but also other facilities for relaxation that attracted huge people. The increase of visitors due to time made the government expand the area with new spot tourism such as Gondola to small islands close to Lego-Lego. The new tourism spot planned is expected to promote tourism and service of transportation with the new model. In other words, understanding the trip patterns and activities of visitors on lego-Lego enables the government to identify the demand of facilities of tourists and visitors, which in turn enhances the satisfaction and encourages repeat visits to this place (Basal & Klenosky. 2001).

Most of the studies especially trip patterns on tourism spots in Bali, Indonesia was investigated (Hermawati et al., 2019). The model investigated the significant characteristics affecting of trip chain and mode of transport of international tourists. It is examined the sensitivity of the increasing time and cost with the choice of trip chain and showed that the mode transportation with the long trip chain used small mode (car) tend over the short trip chain with big mode transport (bus) in many areas around Bali. However, our study only focused on the trip chain between facilities and the time used. This study, therefore, aimed to identify the traveling pattern of people who have visited and used the facilities. In addition, their preferences regarding the individual background that shows the aggregation of visitors to Lego-Lego were investigated.

## **Material and Methods**

A questionnaire was designed to collect information from the visitors. The surveyors were interviewing the respondents before they leave Lego-Lego after they used and spent time in the facilities. The survey questionnaire was formulated to record specific information about the individual characteristics, trip characteristics, time spent, and space for trip chain information. The total visitors are consisting of morning and noon sampling who were staying and used facilities. Total respondents were 1218 which came from 843-morning samples and 345-noon samples. In the data collection process, the sample was taken randomly divided into morning (06.00 – 12.00) and noon (14.00 – 22.00) considering the weekend for peak time.

### ***Descriptive and quantitative***

The trip patterns and activities with descriptive and quantitative analysis approach were used as it gives in-depth information (Hakim et al., 2017). The descriptive analysis showing the characteristics of visitors who have come are summarized in proportion aggregated. The descriptive of characteristics records the gender, age, occupation, income, education, the origin of travel, mode of transport, and vehicle ownership. These described the individual background of visitors of Lego-lego with percentages aggregated from total samples. Meanwhile, the quantitative analysis with loading the trip of visitors during their time using the facilities. The facility is used as long as in Lego-Lego then tabulated and clustered into the frame. This is one of the proper ways to obtain clarification of the trip pattern of visitors.

### ***Correlation for trip pattern***

Correlation is frequently used to refer to a linear relationship between two continuous variables, which is written as Pearson product-moment correlation (Schober et al., 2018). Pearson correlation coefficients are frequently used to describe data that are normally distributed in pairs (data that follow a bivariate normal distribution) (Profillidis & Botzoris, 2019). Pearson

correlation coefficients are used to quantify linear relationships and are notoriously susceptible to outliers (Paroqi et al., 2020). It is determined by assigning a numerical value to each of the two groupings (from largest to smallest or vice versa, this does not matter) (Schneider et al., 2021). In the event of a tie, the average ranking is utilized (Algers et al., 2001). Regarding the trip pattern activities due to activities in the morning and noon, this study used Pearson correlation to investigate. The correlation between trip chain patterns and activities used in facilities is described using the Pearson test. The two groups' morning activities and noon activities trip pattern is performed to find the relation between time activities using facilities and trip pattern.

## Results and Discussion

The individual characteristics were computed. The results revealed the percentage of gender, age, occupation, income, education, the origin of travel, mode of transport, and vehicle ownership shown on the following Table 1.

Table 1. The Individual characteristics of visitors

No	Data	Percentage (%)	No	Data	Percentage (%)
1	Gender		5	Education	
	a. Male	52,46		a. Elementary	1,31
	b. Female	47,54		b. Middle School	4,84
2	Age			c. High School	51,40
	a. < 14 years	0,90		d. Vocational	5,17
	b. 15 – 23 years	48,77		e. Bachelor	33,42
	c. 24 – 32 years	28,49		f. Master/Doctoral	3,86
	d. 33 – 41 years	11,00	6	Origin of Travel	
	e. 42 – 50 years	7,06		a. Home	88,51
	f. 51 – 59 years	2,55		b. Office	0,57
	g. 60 – 68 years	0,99		c. School	0,25
3	Occupation			d. Campus	2,22
	a. Student	7,06		e. Mall	1,64
	b. College Student	38,18		f. Relative's House	2,87
	c. Private Employee	19,13		g. Etc	3,94
	d. Police	2,71	7	Mode Transport	
	e. Civil Servant	12,73		a. Bicycle	8,54
	f. Entrepreneur	9,77		b. Motorcycle	50,00
	g. Politician	0,33		c. Car	29,64
	h. Retired	1,07		d. Online taxi (motorcycle)	2,46
	i. etc. (house wife, unemployee)	9,03		e. Online taxi (car)	2,22
4	Income (IDR)			f. Public Transport	0,57
	a. < 1.6 million	50,5		g. Walk	4,93
	b. 1,6 – 2,3 million	5,6		h. Etc.	1,64
	c. 2,3 – 3,1 million	8,3	8	Vehicles ownership	
	d. 3,1 – 3,7 million	11,2		a. None	14,3
	e. 3,7 – 4,4 million	8,3		b. None Car + Motorcycle	43,5
	f. 4,4 – 5,1 million	7,3		c. Car + None Motorcycle	3,1
	g. 5,1 – 5,9 million	3,5		d. Car + Motorcycle	39,1
	h. > 5,9 million	5,2			

The characteristics of data is described briefly of visitors who has visited Lego-Lego that meaningful to identify the background and then the trip pattern activities are used to provided information about the total pattern formed by visitors. The trip pattern of activities using the facilities is shown on the following Table 2 (for morning) and Table 3 (for afternoon).

Table 2. The trip pattern for morning

Trip Pattern Activities using Relaxation Facilities on Lego=Lego in the Morning N = 843								
N o	Pattern	Percent- age (%)	N o	Pattern	Percent- age (%)	N o	Pattern	Percentage (%)
1	4	17,08	29	512	0,47	57	412	0,12
2	24	11,39	30	5242	0,47	58	421	0,12
3	2	11,27	31	5412	0,47	59	453	0,12
4	54	9,02	32	25212	0,47	60	525	0,12
5	5	5,81	33	12	0,36	61	535	0,12
6	242	5,69	34	23	0,36	62	543	0,12
7	42	4,39	35	124	0,36	63	2432	0,12
8	3	2,85	36	214	0,36	64	2542	0,12
9	34	2,49	37	2424	0,36	65	3424	0,12
10	45	2,37	38	4212	0,36	66	3432	0,12
11	424	2,14	39	5434534	0,36	67	3434	0,12
12	212	1,54	40	35	0,24	68	4254	0,12
13	52	1,42	41	243	0,24	69	4324	0,12
14	142	1,19	42	254	0,24	70	5212	0,12
15	43	1,07	43	324	0,24	71	5324	0,12
16	524	1,07	44	343	0,24	72	5353	0,12
17	434	0,95	45	414	0,24	73	21242	0,12
18	542	0,95	46	423	0,24	74	24212	0,12
19	21	0,83	47	534	0,24	75	24242	0,12
20	32	0,83	48	541	0,24	76	32524	0,12
21	454	0,83	49	4152	0,24	77	34354	0,12
22	25	0,71	50	4524	0,24	78	45342	0,12
23	1	0,59	51	5421	0,24	79	52124	0,12
24	234	0,59	52	41	0,12	80	52421	0,12
25	545	0,59	53	245	0,12	81	54142	0,12
26	14	0,47	54	312	0,12	82	54345	0,12
27	53	0,47	55	314	0,12			
28	342	0,47	56	354	0,12			

Notes: Pattern Place 1 = Food Court, 2 = Courtyard, 3 = Playground, 4 = Rest Area, 5 = Sport Centre

The trip patterns have recorded the sequence of visitors who used facilities since arrival in Lego-Lego starting and ending up from the parking area. In simplifying identification purposes a code number of facilities is used. In the morning, the most trip pattern actually from parking – rest area – parking. The rest area is the larger area facilities in the middle and accessible to any other facilities. In the morning, the rest area is used by visitors after walking, workout, exercising, and relaxing.

In the afternoon, the facilities used to perform activities in Lego-Lego are shown in Table 3. The table shows the most trip pattern is parking – courtyard – rest area – parking. The situation

in the noon at Lego-Lego involved the courtyard facility as one of the most visited instead of the rest area.

Table 3. The trip pattern for noon

Trip Pattern Activities using Relaxation Facilities on Lego=Lego in the Noon N = 375								
No	Pattern	Percentage (%)	No	Pattern	Percentage (%)	No	Pattern	Percentage (%)
1	24	13,87	27	45	0,80	53	254	0,27
2	2	12,27	28	4534	0,80	54	342	0,27
3	242	6,93	29	4542	0,80	55	345	0,27
4	54	6,40	30	24124	0,80	56	354	0,27
5	4	6,13	31	5434534	0,80	57	421	0,27
6	42	4,53	32	23	0,53	58	543	0,27
7	434	2,93	33	52	0,53	59	1434	0,27
8	21	2,67	34	53	0,53	60	2414	0,27
9	5	2,40	35	234	0,53	61	2421	0,27
10	454	2,13	36	241	0,53	62	2423	0,27
11	43	1,87	37	324	0,53	63	2434	0,27
12	2124	1,60	38	412	0,53	64	2454	0,27
13	3	1,33	39	423	0,53	65	2542	0,27
14	424	1,33	40	534	0,53	66	4123	0,27
15	542	1,33	41	545	0,53	67	4324	0,27
16	2424	1,33	42	3242	0,53	68	5324	0,27
17	42132	1,33	43	4124	0,53	69	5341	0,27
18	34	1,07	44	4213	0,53	70	24214	0,27
19	124	1,07	45	4242	0,53	71	24244	0,27
20	214	1,07	46	4545	0,53	72	31242	0,27
21	524	1,07	47	5454	0,53	73	34242	0,27
22	2142	1,07	48	25	0,27	74	42345	0,27
23	4214	1,07	49	35	0,27	75	42424	0,27
24	24242	1,07	50	41	0,27	76	54345	0,27
25	1	0,80	51	141	0,27	77	2121412	0,27
26	12	0,80	52	212	0,27			

Notes: Pattern Place 1 = Food Court, 2 = Courtyard, 3 = Playground, 4 = Rest Area, 5 = Sport Centre

The different trip patterns between morning and afternoon are then presumed to have contributed while using the facilities. The trip pattern indirectly shows the most visited facilities as the preference's essential information due to the program government expanding any other tourism area in CPI. The study of trip pattern and activities time in Lego-Lego as a milestone is used to overview the demand of facilities of visitors.

Table 4. Correlation of trip pattern

Correlations		Morning	Noon
Morning	Pearson Correlation	1	0,427
	Sig. (2-tailed)		0,339
	N	7	7
Noon	Pearson Correlation	0,427	1
	Sig. (2-tailed)	0,339	
	N	7	7

According to the trip pattern, the same trip pattern with the most for morning and noon is clustered. The same trip patterns are (2, 24, 242, 4, 42, 5, and 54). The trip pattern was then analyzed with Pearson correlation and shown the result in Table 4.

The result for a trip pattern of visitors showed a less significant effect on the demand for facilities used in the morning and afternoon. Hence, the value of the test is 0,427 while the upper 0,005 is the significant value. Although this study contributed to understanding the demand for facilities for multi-purpose relaxation activities, there are some flaws or limitations which would lead to further research. The limitation relates to the period for taking samples having to be based on the proportion of time that is considered for more samples on peak hours visited. The result would be stronger if the samples not only consider the random subject but also the time for taking the sample.

## Conclusion

From the overall implications of this study, it could be concluded that the most trip pattern of visitors in the morning is “parking – rest area – parking” while at the noon is “parking – courtyard – rest area – parking”. The trip pattern and facilities used due to morning and afternoon activities have less correlation with most often facility used is rest area and courtyard. In another word, the government enables provide relaxation facilities such as rest areas and courtyards to ensure the tourist's needs and improve all types of services provided.

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