Public Space Visitor's Behaviors with the Use of **Mobile Phone Features:** Case study in Losari Beach Platform Makassar City, Indonesia

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ABSTRACT

Research focused on the intersection two aspects of people interaction and communication activities in public spaces and people's behavior in using mobile phones with the case in Losari beach platform. Losari beach is one of the crowded public spaces and an icon of Makassar.

Research objectives are determine characteristic of mobile phone use by age and gender, relationship between mobile phone features behavior and mobile phone physical behavior in public space. This research uses observation and questionnaires method to find mobile phone behavior and features data in public space. The findings are the visitors who use mobile phone dominated adult with male more than female except in session 3 (17:00-19:00) the number of female more than male, the main functions of mobile phone for sms/mms and calling has change into camera function, and the mobile phone behavior tends to be dynamic and active in Losari beach platform.

Keywords: public space; mobile phone features; physical behavior; Losari Beach platform.

1. INTRODUCTION

1.1 Background

Public Space is the area or public land where people can perform functional activities or activities of a public ritual that can bind a community, whether it's routine activities of daily or periodic events¹. Public space as social and cultural functions describes the expression of local culture, a means of communication, interaction and a place for play and recreation.

Mobile phone is one of the information and communication technology devices that are the characteristic of modern urban society who have a high mobility. The main feature of the mobile phone is a calling facility.

Public space is one of the three-dimensional spaces in architecture and urban design. Mobile phone is a digital service information technology in communication subject. Previous studies discussed that subject separately, research on public space performed in architecture and urban design while mobile phone research conducted in information technology communication subject.

This study focused on the intersection on two aspects of people interaction and communication activities in public spaces and people's behavior in using mobile phones. Intersection on the two subjects is both a means and device of interaction and communication society (figure. 1 research outline).

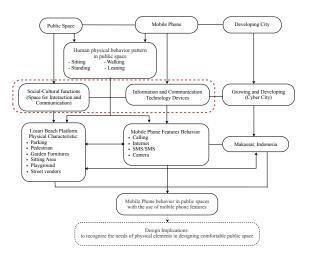


Fig.1. Research Outline

Public space as a means and space of interaction and communication need to be designed to provide comfort to the people who use interaction and communication mobile phone devices. Hence the final goal of this study is to recognize the needs of the physical elements in designing comfortable public space. To achieve it would be performed some related research.

The first thing to do is to find out the trend of use of mobile phones and mobile phone behavior in preliminary, space.In the performed in Makassar, Indonesia as developing area. Nonetheless this research can be done anywhere in both in the developing and developed areas.

Makassar as a main gate in northeastern part of Indonesia is growing and developing to be a modern city. Consequently, Makassar society would be affected by the behavior of modern life. One of the behavioral changes is increasing the use of mobile phone in the last decade. Mobile phone is no longer considered a luxury item because of all societies have to have it. Mobile phone use to get information and make friends through the Internet facilities is available on the mobile phone. Mobile phone users could be found in almost all parts of the city, especially in public spaces.

In some public spaces in Makassar, mobile phone function not only for two-way communication devices but also for another function likes searching Internet and taking photo.

One of the crowded public spaces in Makassar is Losari beach. Losari beach is an icon of Makassar. Recently, Losari beach has three platforms but just one that enabled. Various social-cultural activities, community interaction and communication are done on the Losari beach platform. In addition, Losari beach platform has beautiful view. Visitors can see the sunrise and sunset in a similar position.

1.2 Research Objectives

Research objectives are:

- To determine the characteristics of mobile phone use in public spaces by age and gender with case studies Losari beach platform.
- To determine mobile phone features behavior and the relationship with mobile phone physical

behavior in public space with case studies Losari beach platform.

The following are some of the propositions that support the hypothesis that will be established.

- Total population of Makassar in 2009 is 1.272.349 with 610.270 males and 662.079 females. Sex ratio of Makassar population in 2009 is 92,17 percent, it means that for each 100 population of females be found 92 population of males. Although the number of female more than male but the number of female accessing public space less than male. Socio cultural and traditional meaning not just let these women to be active outside. Construction of thinking about women who made the gentle woman as someone who should be "privileged", while men are tough is the "protector". This way of thinking is what brings the role of women in public space is less open⁶.In Indonesia, the opportunity to enter the public space for women is still not open enough'.
- Mobile phone users in Indonesia have reached more than 75 million users. The most lucrative segments are young executive (adult) and teenagers (The Indonesian Cellular Phone Association (ATSI), the end of March 2007).
- SMS is mobile phone features the most commonly used followed by the Internet and music. Based on the time in the use of mobile phones, in the morning at breakfast, afternoon 15:00-16:00, and evening is a time where mobile phone use most often⁸.

Based on the purposes and proposition it set some hypotheses to be examined by observation and questionnaires. The hypotheses are:

- The number of Losari beach visitors who use mobile phones more than those not using mobile phones by the dominant age and gender characteristics is adult and male.
- Mobile phone feature behavior of the most commonly used in public spaces is a feature for message (sms/mms) with a mobile phone physical behavior is standing.

Physical elements of public space form the actual behavior as a basic pattern of human activity (the of human pattern behavior) communicating such as sitting, walking, standing and leaning (based on observation, 2010-2011). While the mobile phone features behavior are calling, sms/mms, Internet and take a photo (use camera phone).

1.3 Overview of Research Site

Research was conducted in Makassar as the capital of South Sulawesi Province, Indonesia. Makassar is Located between 119°24'17'38" East Longitude and 5°8'6'19" South Latitude with 175,77 km2 include 14 district (fig.2.)



Fig.2. Losari beach Platform in Makassar Map

Various economic and social facilities built to support the increasing of Makassar societies mobility. One of the facilities of public space that is being built is Losari beach platform. Losari beach platform consist of green open space 0.04 ha and on-green open space 0.9 ha. There are three of the monument that symbolizes South Sulawesi community pride Phinisi sailboat, the first located in the middle of the parking area, and two monument is located right in the middle of the platform. Losari has a unique and fascinating feature. One of its uniqueness is the visitors can watch the sunrise and sunset in the same position. The visitors also can enjoy a variety of fresh seafood. The visitors can sample a variety of foods typical of Makassar. Another specialty is the visitors can access Internet for free through the hot spots along Losari. Atmosphere in Losari beach platform can be seen in figure 3.



Fig.3. Losari beach Platform in the afternoon (session 3) Source: Author, 2011

Losari Beach was crowded by people with various activities to spend their time in the weekend, even Penghibur street which is access to Losari beach platform closed to vehicles.

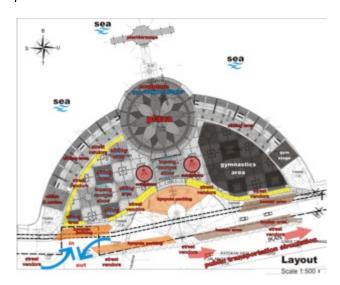


Fig.4. Losari beach platform layout Source: Modified from Losari beach platform revitalization project.

Physical character of public space on Losari beach platform is equipped with various supporting facilities such as parking, pedestrian, toilets, garden lights, children's playground, seating area and street vendors. See figure 4.

Therefore, Losari beach platform is very active place for Mobile phone activity. Various mobile phone behaviors going on Losari beach platform, such as using mobile phone while sitting, walking, standing or leaning.

2. PREVIOUS STUDY

In recent years, several researchers started to turn attention to social aspects of cell phone diffusion and the impacts cell phones had on people daily lives and relationships.

Mizuko Ito analyzes the material in terms of intergenerational dynamics of mobile phone use in three kinds of places: the private space of the home, public spaces of public transportation and street, and the virtual space of online peer connectivity. The paper concludes that many patterns of teen text messaging are structured by adult control over the spaces that they frequent and an increasingly structured set of social norms governing mobile communications².

Audrey N. Selian in study about Mobile Phones and Youth, one of the most interesting questions in this survey deals with identifying the spaces in which mobile usage among young people is most prevalent³.

Shari P Walsh, a particular focus of the research program was to explore both the cognitive and behavioral aspects of young people's mobile phone behavior, which for the purposes of the thesis is defined as mobile phone involvement⁴.

Ran Wei and Louis Leung findings of a general survey show that the use of cell phones has gained tremendous social popularity. Cell phones extend the traditional wired telephony and replaced paging services⁵.

The previous studies discuss the use of mobile phones, public space and behavior separately. This study focused on the intersection on two aspects of people interaction and communication activities in public spaces and people's behavior in using mobile phones.

3. WORK DEFINITION

Public space is held for the various interests and public activities, in the sense that anyone, without limitation, free of charge/without pay, may interact in that space, giving the function as a channel for movement, a communication point and a place for play and recreation.

Mobile Phone physical behaviors are the basic pattern of human activity includes: walking, standing, sitting, and leaning. Mobile phone features are the basic function of mobile phone includes: calling, sms/mms, Internet and camera.

4. METHOD

This research use quantitative method by direct observation to the location to find out the real mobile phone behavior in public space with the use of mobile phone features and questionnaires to find out what visitors want and think about the mobile phone behavior in public space.The questionnaire was conducted for data crosscheck with observation data.

The questionnaire asked about: gender, age, mobile phone physical behavior and mobile phone features behavior. In preliminary survey number of respondent that return the questionnaire is 20, that's way each session was distributed 20 questionnaires. Almost all respondents return the questionnaire distributed except by chance distributed questionnaires to the children.

The observation and questionnaire were conducted during one week from Monday-Sunday in June 26th – July 3rd 2011. Two observers recorded and counted the actual mobile phone behavior visitors of Losari beach platform and one observer spread the questionnaire. Observations and distributing questionnaire was divided in three sessions; session 1 from 06:00 - 08:00; session 2 from 11:00 - 13:00; session 3 from 17:00 - 19:00. Session characteristic can be seen in table 1.

Table 1. Sessions characteristic

Time	Monday-Friday	Saturday-Sunday
Session 1 06:00-08:00	- School start - Office start	Holiday
Session 2 11:00-13:00	- Rest time - Lunch	Holiday
Session 3 17:00-19:00	- School and office end	

Source: Author, 2011

Respondent age determined by asking directly and was taken at random and controlled by time. Respondent was classified based on ages: kids (< 10); teen (11-19); adult (20-44) and elder (45 <). The terms was used in observation can be seen in table 2. Mobile phone physical behavior was observed about: sitting, walking, standing and leaning.

Table 2. The terms was used in observation

Terms	Meaning
MP	(Mobile Phone)=the number of MP users, who are using MP who was on the phone (calling), sms, Internet, Camera
hMP	(hold Mobile Phone)=the number of people who do not use MP but has MP (holding the MP)
HS	(Headset)=the number of people using a headset, both for calls and for other purposes (listening to music, etc.)
nMP	(Non Mobile Phone)=the number of people who did not appear to hold MP

5. OBSERVATION RESULTS

5.1 Preview of Mobile Phone Activity in Losari beach platform

Based on observations during a week activities performed in Losari beach platform are as varied as tourism, entertainment, performance, sport, shopping, eat and drink, take a photo, calling, reading, meet a friend, fishing, bike etc (figure 5). Among all activities, the use of mobile phones is interesting to observe. Visitors using mobile phones not only for telephone and other communication functions but also they use the existing cameras facilities on mobile phones for

photographed



Fig.5. Various Activities in Losari beach Platform. Source: Author, 2011

The direction of mobile phone users access near the parking area, which lead to the outside platform area (go back and / or to other places outside the platform) and headed into the platform is dominated towards western region bordering the sea.

While mobile phone users who are in the northern two Phinisi monuments, mostly using a cell phone for SMS and phone or take pictures and play the game by sitting at the "roundabout" to contact relatives and / or while waiting for relatives who are sports.

Mobile phone users in the southern two monuments, the residents who tend to seek a more tranquil atmosphere for the activities with friends and family, talking on the seat is available, they are relatively stand by at the place and there are several access-go to the article "Pantai Losari " for take photos.

Mobile phone users in the middle of the monuments is dominated by the use of mobile phones to take pictures with the main object of the writing on the back, there are some who call while standing just tell his position to friends or relatives.

Mobile phone users who are on the west, which borders the sea view, conduct their activities with a sit and for along the sea view on the platform.

5.2 Mobile Phone Use

The number of visitors in Losari beach platform during observation for a week is 4823. It is divided 2136 (44.29%) visitors who are using mobile phone (MP) who was on the phone (calling), sms, Internet and Camera, 187 (3.88%) visitors who do not use but has mobile phone (hMP), 183 (3.79%) visitors using headset, and 2317 (48.04%) visitors who did not appear hold mobile phone. It can be seen in table 3. If the percentage of MP, hMP and HS summed obtained that the number of visitors who own a mobile phone in Losari beach platform is 51.96%.

Table 3. The Ratio of Mobile Phone Use

Time	Mol					
Day	Session		Us	e		Total
		MP	hMP	HS	nMP	
Mon	1	25	0	0	51	76
	2	25	0	0	20	45
	3	105	18	7	93	223
Tues	1	63	5	10	83	161
	2	22	0	2	30	54
	3	164	35	14	197	410
Wed	1	149	6	28 201		384
	2	30	3	2	34	69
	3	214	13	8	162	397
Thur	1	84	5	9	108	206
	2	30	7	3	48	88
	3	108	14	4	120	246
Fri	1	85	5	14	89	193
	2	29	5	2	43	79
	3	114	9	6	143	272
Sat	1	87	14	12 129		242
	2	32	3	1	42	78
	3	249	13	9	174	445
Sun	1	252	10	30	343	635
	2	37	3	5	35	80
	3	232	19	17	172	440
	Total	2136	187	183	2317	4823

The number of visitors Losari who use mobile phones in session 3 more than those not using mobile phones except in session 1 and 2 the number who do not use mobile phones more than use mobile phone, although the difference is not too much (fig. 6).

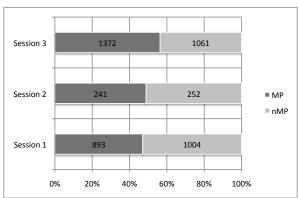


Fig.6. Mobile phone use in Losari beach platform.

But generally, the total amount who using mobile phone still more than those not using mobile phone. This indicates that the society requires mobile phone devices as a means of interaction and communication in public spaces.

5.3 Characteristic of Mobile Phone use in Losari beach platform bv ages classification

The characteristics of visitors divided into older, adults, teen and kid. Generally, the number of visitors using mobile phone in Losari beach platform in each session during observation for a week dominated by adult as 1101 (51.54%), then teen as 840 (39.33%) and few of old as 195 (9.13%) and none of kid.

The highest visit occurred in session 3 from 17:00-19:00 at the sunset time. They came to enjoy the beautiful sunset in the afternoon. The graph can be seen in figure 7.

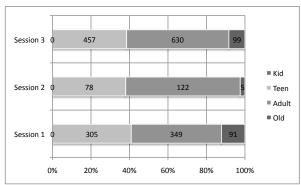


Fig.7. Mobile Phone Use by age classification

The lowest number of visitors who use mobile phones occurred at session 2 from 11:00-13:00. The Makassar citizens go to lunch break and Dhuhr prayer for the Moslems at noon. In addition, when observation carried out Makassar at the noon is hot.

5.4 Characteristic Mobile Phone Features and Physical Behavior in Losari beach platform

Mobile phone features are most commonly used in public space are Calling, SMS, Internet and Camera, as well as on the Losari beach platform these feature is widely used by visitors. Camera phone feature is the highest ratio using in all session in Losari beach platform. The ratio of visitor using camera phione feature in session 1 is 469, session 2 is 93 and sessiuon3 is 794. The ratio of mobile phone features likes calling, internet and sms/mms in each session can be seen in figure 8.

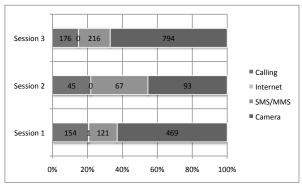


Fig.8. Mobile Phone Features behavior each session.

Camera phone features are the most commonly used in Losari beach platform in session 3 from 17:00-19:00. It describes that the most of Losari beach platform visitors come to take photographs using a camera phone with the sunset background.

The commonly performed mobile phone physical behavior by visitor is the sitting, walking, standing and leaning. In session 1 and 3 the number of visitors is standing more than session 2. The ratio of visitor standing in session 1 is 468, session 3 is 774 while in session 2 just 48. Especially in session 2 the number of visitors is sitting more than standing and another physical behavior. In session 2 the ratio of visitor sitting is 137, standing is 48, walking is 19 and leaning is 1. The graph can be seen in figure 9.

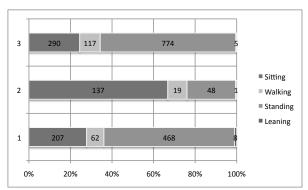


Fig.9. Mobile Phone Physical behavior

The trend mobile phone behavior in session 1 and 3 is standing because visitors use mobile phone while exercising, taking pictures and enjoying the fresh environment. At noon in session 2, where visitor numbers are relatively few mobile phone behavior tends to sitting. They take advantage of sitting area to use mobile phones because of hot weather. This indicates that the visitors mobile phone behavior in public space such as Losari beach platform tend to be dynamic and active.

5.5 Relation between Mobile Phone Features and Physical Behavior in Losari beach platform

The relation between mobile phone physical behavior and mobile phone features in each session shown in table 4.

Table 4. Mobile phone behavior

T	ime	Mobile Phone Behavior									
Day	Session	Feature Behaviors		Physical Behaviors							
			Sitting	Walking	Standing	Leaning					
		Calling	59	46	41	7	153				
	1	SMS/MMS	77	16	28	0	121				
	1	Internet	1	0	0	0	1				
		Cameras	70	0	399	1	470				
	2	Calling	32	8	4	1	45				
Monday-		SMS/MMS	52	11	4	0	67				
Sunday		Internet	0	0	0	0	0				
		Cameras	53	0	40	0	93				
		Calling	82	63	29	2	176				
	3	SMS/MMS	114	54	48	0	216				
	3	Internet	0	0	0	0	0				
		Cameras	94	0	697	3	794				
		Total	634	198	1290	14	2136				

Session 1, the visitors ratio who use sms/mms feature while sitting as 77 it means more than visitors using other features such as cameras as 70, calling as 59 and Internet as 1. The visitors ratio who use calling feature while walking as 46 it means more than sms/mms as 16, Internet and camera 0. The Visitors ratio whose use camera while standing as 399 it means more than calling as 41, sms/mms as 28 and Internet 0. In addition, there are also visitors who use calling features while leaning as 7, camera as 1, sms/mms and Internet 0. This shows that visitors mobile phone behavior tend to sitting in using the sms/mms feature, although many are also sitting while taking photos use camera phone. In using calling features visitors tend to be walking and there is also a small part leaning. The most widely used features on the mobile phone standing behavior are camera phone.

Session 2, the number of visitors less than other sessions, the visitors ratio whose use camera and sms/mms feature while sitting almost same as 53 and 52 while using calling feature as 32 and Internet 0. The visitors ratio who use sms/mms feature while walking as 11 it means more than calling as 8, Internet and camera 0. The Visitors ratio whose use camera while standing as 40 it means more than calling as 4, sms/mms as 4 and Internet 0. There are also 1 Visitors who use calling features while leaning none of them use camera, sms/mms and Internet. Same as session 1, this shows that Visitors mobile phone behavior tend to sitting in using the sms/mms and camera

feature. Different is in session, visitors tend to use the sms/mms features while standing, but the difference is very small with calling features. Except in using calling features visitors tend to be walking and there is also a small part leaning. The most widely used features on the mobile phone standing behavior are camera phone.

Session 3, the visitors ratio who use sms/mms feature while sitting as 114 it means more than visitors using other features such as cameras as 94, calling as 82 and Internet 0. The visitors ratio who use calling feature while walking as 63 it means more than sms/mms as 54, Internet and camera 0. The Visitors ratio whose use camera while standing as 697 it means more than sms/mms as 48, calling as 29 and Internet 0. There are also visitors who use camera features while leaning as 3, calling as 2, sms/mms and Internet 0. The mobile phone behavior tendencies in session 3 are almost same as session 1. The difference with session 1 is in session 3 in sms/mms while standing more than calling than standing.

6. QUESTIONNAIRE RESULT

6.1 Characteristic of Mobile Phone use in Losari beach platform classification

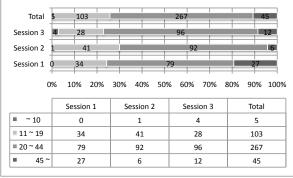


Fig.10. Mobile Phone use by age classification

Visitors who use mobile phones in Losari beach platform with the questionnaire method also dominated by adult 267, teen 103, old 46 and kid

The percentage is adult 63.57%, teen 24.52%, old 10.95% and kid 1.19%. This condition occurs in all session. The graph can be seen in figure 10.

The visitors consisted of 214 male and 206 female. Male dominates Sessions 1 and 2, except session 3 dominated by female. The graph can be seen in figure 11.

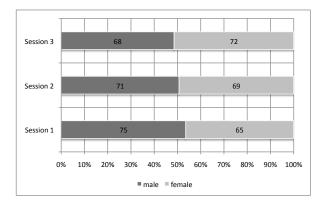


Fig.11. Mobile Phone use by gender classification

6.2 Relation between Mobile Phone Features and Physical Behavior in Losari beach platform

Mobile phone features behaviors are camera 228, calling 95, sms/mms 95 and the Internet 1. Camera feature is the most widely used in the morning (session 1) and afternoon-evening (session 3) while at noon (session 2) the most widely mobile phone feature behavior is sms/mms. The graph can be seen in figure 12.

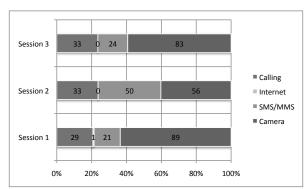


Fig.12. Mobile phone features behavior

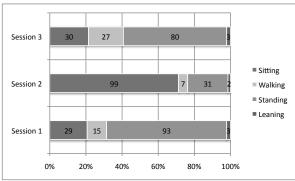


Fig.13. Mobile phone physical behavior

Mobile phone physical behaviors are standing 204, sitting 158, walking 49 and leaning 8. Standing is most widely performed in the morning (session 1) 93 respondents and afternoon (session 3) 80 respondents. Sitting mostly done in the afternoon (session 2) 99 respondents. The graph can be seen in figure 13.

7. ANALYSIS

Observations and questionnaires that have been made provide some similar results and there are also different results with the initial hypothesis. This describes the correlation and the contradiction between the hypotheses, observations and questionnaires. The table can be seen in table 5 and 6.

Table 5. Mobile phone behavior ratio analysis

Time	Mobile Phone Behavior														
	N	MP Use		Gender			Age			Features			Physical		
	Н	0	Q	H O Q		Н	О	Q	н о		Q	Н	О	Q	
	MP	893	140	Male	-	75	Kid	0	0	Calling	154	95	Sitting	207	29
Session 1	nMP	1004	0	Female	-	65	Teen	305	34	Internet	1	1	Walking	62	15
Session 1							Adult	349	79	SMS/MMS	121	21	Standing	468	93
							Old	91	27	Camera	469	89	Leaning	8	3
	MP	241	139	Male	-	71	Kid	0	1	Calling	45	33	Sitting	137	99
Session 2	nMP	252	1	Female	-	69	Teen	78	41	Internet	0	0	Walking	19	7
Session 2							Adult	122	92	SMS/MMS	67	50	Standing	48	31
							Old	5	6	Camera	93	56	Leaning	1	2
	MP	1372	140	Male	-	68	Kid	0	4	Calling	176	33	Sitting	290	30
Session 3	nMP	1061	0	Female	-	72	Teen	457	28	Internet	0	0	Walking	117	27
Scanon 3							Adult	630	96	SMS/MMS	216	24	Standing	774	80
							Old	99	12	Camera	794	83	Leaning	5	3

In session 1, 2 and 3 hypothesis assumes that visitors Losari Beach platform that uses a cell phone more than he does not use a cell phone. Observations have shown different results in sessions 1 and 2 that visitor who do not use cell phones more than the visitors who use cell phones except in session 3 showed similar results to the hypothesis. While the questionnaire showed similar results to the hypothesis.

Mobile phone use by gender in session 1 and 2 showed similar results between the hypotheses and the questionnaire are more male who use mobile phones than female. While in session 3 showed contradiction results which number of female more than male. It is uncommon where in session 3 from 17:00 to 19:00 is the evening is supposed to be the number of men more than women but the questionnaire showed the opposite results. Mobile phone features behavior shows the hypothesis by observation and questionnaire results are also contradiction.

As we know that the primary function of mobile phones is a communication devices with the calling and sms/ mms, but the results of observation and questionnaires shows that the primary function has shifted into а device for taking photographs/camera. It can be seen from the results of observation and questionnaires in sessions 1, 2 and 3 that the number of visitors using a mobile phone camera to take pictures

Table 6. Mobile phone behavior analysis															
Time		Mobile Phone Behavior													
	MP Use Gender					Age			Features			Physical			
	Н	0	Q	H	0	Q	Н	0	Q	Н	0 (Н	0	Q
	MP	nMP	MP	Male		Male	Adult	Adult	Adult	SMS/MMS	Camera	Camera	Standing	Standing	Standing
Session 1	nMP	MP	nMP	Female		Female	Teen	Teen	Teen	Calling	Calling	Calling	Sitting	Sitting	Sitting
Session 1							Old	Old	Old	Internet	SMS/MMS	SMS/MMS	Walking	Walking	Walking
							Kid	Kid	Kid	Camera	Internet	Internet	Leaning	Leaning	Leaning
	MP	nMP	MP	Male		Male	Adult	Adult	Adult	SMS/MMS	Camera	Camera	Standing	Sitting	Sitting
Session 2	nMP	MP	nMP	Female		Female	Teen	Teen	Teen	Calling	SMS/MMS	SMS/MMS	Sitting	Standing	Standing
Session 2							Old	Old	Old	Internet	Calling	Calling	Walking	Walking	Walking
							Kid	Kid	Kid	Camera	Internet	Internet	Leaning	Leaning	Leaning
_	MP	MP	MP	Male		Female	Adult	Adult	Adult	SMS/MMS	Camera	Camera	Standing	Standing	Standing
Session 3	nMP	nMP	nMP	Female		Male	Teen	Teen	Teen	Calling	SMS/MMS	SMS/MMS	Sitting	Sitting	Sitting
Session 3							Old	Old	Old	Internet	Calling	Calling	Walking	Walking	Walking
							Kid	Kid	Kid	Camera	Internet	Internet	Leaning	Leaning	Leaning
H:Hypotheses	s. O:Ob	servatio	on. O:C	Duestionna	aire										

much more than the number of visitors who use mobile phones for calling, sms/mms and internet.

The Visitors mobile phone behavior tends to sitting in using the sms/mms feature, although many are also sitting while taking photos use camera phone. In using calling features visitors tend to be walking and there is also a small part leaning. The most widely used features on the mobile phone standing behavior are camera phone. This indicates that Visitors mobile phone behavior in public space such as Losari beach platform tends to be dynamic and active.

Mobile phone physical behavior in sessions 1 and 3 showed similar results between the hypotheses, observations and questionnaires. Except in session 2, showed similar results between the observations and questionnaires that visitors tend to sit in using mobile phones while hypothesis assumes that visitors tend to standing when using a mobile phone.

8. CONCLUSION AND FINDINGS

Based on observations and questionnaires with reference to the objectives and hypotheses of studies have drawn some conclusions and findings.

- 1. Characteristic Losari beach platform visitors who use mobile phone dominated by adult with male more than female except at the third session the number of female more than male.
- 2. The main Mobile phones feature behavior as a device for sms/mms and calling has change in public spaces like Losari beach platform into a device for taking pictures/camera.
- 3. The most commonly mobile phone feature behavior is camera feature with the mobile phone physical behavior is standing in session 1

and 3, and sitting in session 2 in Losari beach platform.

9. FUTURE RESEARCH

This paper is one researches to achieve the design implications for recognize the needs of physical elements in designing comfortable public space. There are still many opportunities to do further research. The further research are to determine the cause of in the conclusions and findings, to identify the types of needs of visitors who use mobile phones to the physical elements in public spaces and can be done by taking the location in another public spaces such as shopping malls, parks, stations etc., may also proceed with a survey conducted by questionnaire method, to perform comparison study between mobile phone physical and features behavior in developed country like in Sendai, Japan and developing country like Makassar, Indonesia. And there are many other possibilities that can be done.

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