The Visitors' Perception toward the Comfort of Social Interaction in Public Space (A Case study in Karebosi Field Makassar)

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Abstract

Public space has an important role to increase physical health and social interaction of city communities. Karebosi field is a public space that is in the development priority by Makassar city government. Karebosi field is the most ideal facility to represent the concept of an open public space in Makassar. After going through revitalization process, the government still continues to reform and refine the Karebosi field functions. This research aims to find out the visitors' perception towards the comfort of social interaction in the Karebosi field, and what factors which are influence them as well. This research was conducted in 2018 at Karebosi field, Makassar. The method used in this research is mixed method (qualitative-quantitative). The technique of data collection is done by evidentiary method through data triangulation (observation, questionnaire, and interview). The result of this research can be concluded that the facility in Karebosi field is quite successful in attracting the visitors to do sport activities in public space, yet the level of success is still not optimal because it is still in the range of 60.89%, which is due to the facility development that has not been varied, the facilities are considered as not being able to stimulate the diversity of social interaction and increasing the number in public space. Designing, Karebosi field is not able to give an impression and meaning for the people who do the activities in it. It is expected to be a reference for Makassar government in formulating the steps to increase the service quality and the functions of the Karebosi field in the future.

Keywords: Perception, public space, social interaction

1. Introduction

Public space is the representative image of a city and it has an important role in increasing physical health and social interaction of city communities. The issue discussed in this research is the revitalization of Karebosi field which is done by the government in Makassar. As public space, Karebosi field is a facility that portrays historical journey of Makassar which has position and function that quite important in Makassar nowadays. Based on this issue, the effect of the revitalization of Karebosi field needs to be examined toward the increasing of the quality and function of Karebosi field. To find out that case, so it needs to do identification processes based on the visitors' perception of the convenience of social interaction in Karebosi field. Perception is the most complete source of information on every individual in evaluating, perception has an important role in deciding someone's attitude and behavior. Therefore, the result of identification which is gotten from the visitors' perception is expected to be a complete source of information in measuring the convenience level of visitors' social interaction in the Karebosi field. Generally, the area of Karebosi field is divided into three zones of public spaces, namely Zone A with area development of 45.77%, zone B 30.93% and zone C 12.84% from the total area of 11.29 hectares, it can be seen in Fig. 1.



Figure 1. (a) the map of area allocation in Karebosi field area (b).The area of research location

From these three zones, based on assessment of nature publicity, the aspect of freedom accessibility, the amount of activity and intensity of visitors, so it can be concluded that zone A is the most suitable area to be used as the limitation of observation scope in Karebosi field area, zone A is considered suitable with the criteria of public space [1] everyone has the same right to come and use public space.

2. Method

This research uses descriptive/qualitative and quantitative method or mixed method. The scope of this research includes the facility of public space, social interaction, and perception to find out the visitors' perception, the observation scope is done in visitors' behavior aspects toward the facility by using controlling and observation method and place center mapping technique. The visitors' attitude aspects of the facility in Karebosi field are measured qualitatively based on Likert scale through questionnaire data validation. The purpose of the research is to find out the visitor's perception toward the convenience of social interaction in Karebosi field.

Theory in [2] is used to measure the visitor' perception toward the quality of social interaction in public space, by using three points, namely structural dimension which is related to accessibility and the use of space, interactive dimension which is related to social relations, kind of activities, the possibility of participation in activity and the participation of decision making in local level, subjective dimension which relates to personal satisfaction of environmental management [2].

There are three problem formulations used to measure the visitor's perception. (1) How is the condition of activities and facilities in Karebosi field, the technique of data collection used is controlling and observation with place center mapping system, (2) How is the quality of Karebosi field if being reviewed by using the quality theory of public open space, based on the theory, the technique of data collection used is the method by giving question to respondents through questionnaire and interview, (3) Visitors' perception toward the convenience of social interaction in public space, the technique of data collection is doing data reduction and concluding the correlation between the visitors' attitude and behavior to the condition of Karebosi's field facility.

3. Result and Discussion

The research results concerning the condition of Karebosi field, based on the observation generally, the condition of facilities in Karebosi field is observed through the aspects of facility condition shown in Fig. 2, so in general the wide of development facility area in Karebosi field area consists of main facilities and supporting facilities.

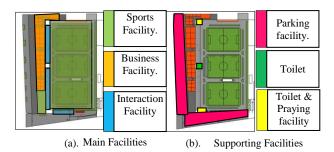


Figure 2. (a) Map of facility zone allocation in the research location (b) The allocation area of the main facility allocation area of the supporting facility

The main area of developing facility is divided into three zones based on the function of the facility. Zone A is the area for sports, Zone B is the facility area for social interaction and Zone C is the facility area for business.

3.1. Correlation aspects among behavior and the condition of facilities and activities

Based on the literature review in [2], there are some conclusions gotten from observation and place center mapping method.

a. The scope of subjective dimension

Based on the observation on accessibility aspects in Fig. 3, it can be concluded that Karebosi field has a strategic location so it can be reached easily, it is located in the central of Makassar city, which is passed by city transportations and it is completed with access alternative which makes easier either for the transportation accessibility or the visitor, in Jl.Jend. Sudirman and Jl. R.A Kartini. This is consistent with the theory in [3] and [4] outlining that one important aspect in a democratic public space is the availability of good accessibility. With good accessibility, it will encourage the use of public space by diverse users.

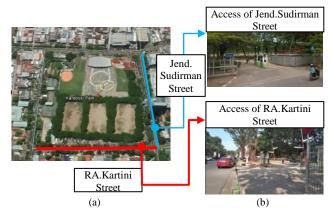


Figure 3. (a) Circulation map in Karebosi field; (b) the situation of access facility on Jnd. Sudirman street (the situation of access facility on R.A. Kartini street)



(a)



(b)

Figure 4. (a) The map of facilities and infrastructure location, (b) The situation of facilities and infrastructure service in Karebosi

Based on the observation on the aspects of use, the availability of supporting facilities in the location is quite complete. It can be seen in Fig. 4 the supporting facilities in Karebosi field consist of service facility, security, sanitary, and parking facility which is quite enough for supporting the visitors in doing their activities. This is following the ideal criteria for public spaces. Public spaces are planned and designed according to the needs of users so that they can provide comfort and convenience in carrying out their activities [5].

Based on the observation on the aspects of the use, if it is observed through physical observation, from Fig. 5, it describes that the condition of sports facility is in the amount of developing area of 79.75%, the second facility namely business facility is about 10.33%, the third facility of the location is social interaction facility which is about 9.92%. Based on the data, it can be concluded that physical condition of Karebosi field area as public space has not been run in balance yet. The sports facility is so dominant in area usage of the facility.

Based on the observation of the usage aspects, Karebosi field area is successful in creating the diversity of the visitors who do activities in it.

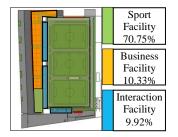


Figure 5. (a) Map of the area allocation for facility development

In Fig. 6, it can be seen the presence of various types of visitors who are intensely doing some activities in Karebosi field area. The regularity visits to Karebosi happens every day with the intensity of the visits constantly increasing at the weekend. The diversity of the visitors in Karebosi in the morning is dominated by the visitors of elder people, men and women (Sunday – Friday). Besides at noon, the number of visitors is dominated by youth, both men and women. Whereas, visits activity on the weekend (Saturday – Sunday) neither in the morning nor at noon is dominated by the youth with a higher visit intensity.

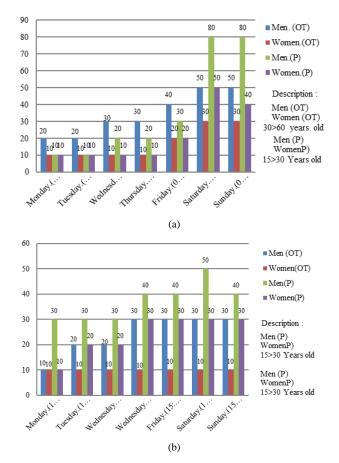


Figure 6. (a) Diagram of visits intensity in the morning. (b) Diagram of visits intensity at noon

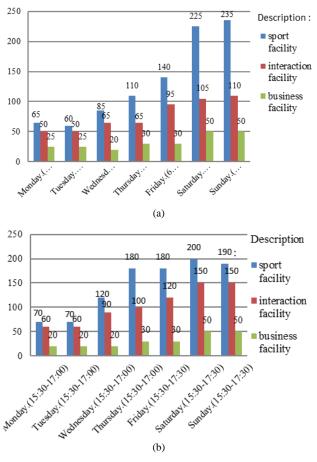


Figure 7. (a) Diagram of facility usage in the morning. (b) Diagram of facility usage at noon

b. The scope of interactive dimension

Based on observation of sociality aspects on the user's behavior in Fig. 7, it can be seen that the main facility in Karebosi field area consists of 3 facilities, namely; sports facility, social interaction facility, and business facility. Based on the measurement of the activities which happen every morning and noon, the highest intensity in the location of the research is sports activity and the second activity is interaction. The third activity is trading/business activity. Based on the diagram, it can be concluded that the behavior of the facilities usage has not run in balance yet. The physical condition of Karebosi field area as public open space has not been optimal in creating an interaction atmosphere among the visitors. It can be seen from the amount of sports activities which are so dominant in the location. This contradicts the theory that public space is a place or space formed because of the need for a place to meet and communicate [6].

Based on the observation of interactive dimension on sociality aspects in Fig. 8, it can be concluded that Karebosi field has not been successful yet in creating a conducive public space to provide the needs of interaction for their visitors. It can be seen in the minimum amount of different types of behavior happens in Karebosi field. Generally, the characteristics of the visitors' interaction behavior found are the same. they are interacting while resting after doing some exercises. They prefer to sit, have conversations, and gather in a crowd, while the other visitors also buy some snacks around the location before they left of their visits in Karebosi.

Based on the data, it can be concluded that Karebosi's field did not provide different types of interaction choices for visitors. The visitors' interaction activities run monotonously. The public space has not been able to create recreation and entertainment choice which could give pleasing experience and meaning for the people who do some activities in public space. This is contrary to aspects that stimulate social interaction in public space [7]. Sociality is the level of a person's ability to make social relations in a setting. The observation on interaction behavior aspects based on the visitors' behavior interaction in Fig.98 shows that generally, people interact in area 1 and 2, they prefer to gather and interact in the area which has higher flurry intensity, generally, and they tend to choose seat facilities and gathering area that close to entrance and parking area where the area is quite crowded of the visitors who come and leave in the facility of this area in which is easy to access their vehicles.

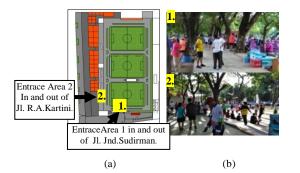


Figure 8. Map area of communal room in Karebosi. (a) The situation of communal area entrance 1, (b) The situation of communal area entrance 2







(b)

Figure 9. (a) the situation of sports activity diversity. (b) The situation of interaction activity diversity

Based on the observation of interaction dimension on the activities diversity aspects in the previous figure, it describes that sports facility in Karebosi's field has the highest different types of activity choices, such as jogging, football, fitness, gymnastics, and strolling. The diversity of the second type of activities in the location is interaction activity which happens in activity form of sitting together, talking, gathering, and some of them enjoy snacks sold in some area in Karebosi. While the third one is trading/business facility, which is buying and selling activities on sale stalls that happens along R.A. Kartini street, and another area that are generally crowded by the visitors.

Based on this case, it can be concluded that development facilities in Karebosi is still unbalanced. The diversity activities of the sports facility in the location is so dominant compared to the other diversity of interaction activity choice provided. This is contrary to the theory of Weisman [7] that says sociality is the level of a person's ability to make social relations in a setting.

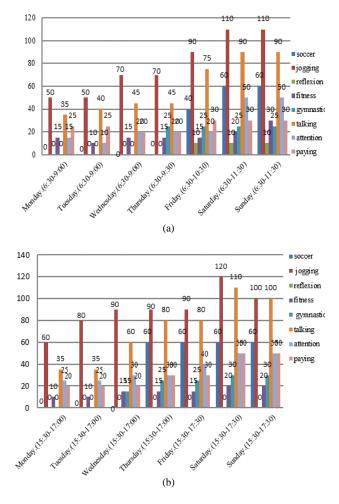


Figure 10. (a) Diagram of intensity and the diverse activities of the visitor in the morning, (b) Diagram of intensity and the diverse activities of the visitor at noon

c. The scope of structural dimension

Based on the observation of the usage aspects, Karebosi field is considered as a successful public space to create the diversity of the types of the visitors. It can be seen by the presence of the different types of the visitors who do some activities in Karebosi, and the routine visits happen every day with the intensity that is increasing at the weekend.

Based on the observation of activity diversity aspects, it can be concluded that Karebosi as a public space is quite successful in creating the diversity of activities in public space. It is based on the diversity of activity behavior that happens regularly in the facility. Generally, there are three types of activities happen in the Karebosi field, namely; sports, social interaction, and business which happens regularly with its intensity that increasing on the weekend.

Based on the observation of diversity sociality aspects, it can be concluded that Karebosi field area is considered as an unsuccessful public space in creating a comfortable environment for the people to interact. It can be seen from the minimum diversity types of interaction behavior found in Karebosi, which makes the visitors' interaction in Karebosi runs monotonously.

3.2. The correlation aspects of response to the condition of facilities and activities

Based on the literature review in [8], there are some conclusions gotten from several visitors through questionnaires and interviews.

a. The scope of subjective dimension

Based on the observation on accessibility aspects, the conclusion shows that generally, the visitors are quite satisfied with the service facilities provided. The utility of facilities and infrastructures is considered to be quite supporting the people during they are doing some activities in Karebosi. Based on the visitors' perception of the utility of the facilities, the convenience of accessibility is quite enough even though it still needs to do some refinement. Yet generally, the visitors are quite satisfied with the location that is supported with strategic location to the accessibility of the facilities that is easily accessible. It is in line with Weisman theory [7] that says accessibility concerns to the ease of moving through and using the environment so that the circulation becomes smooth and it does not make difficulties for the users.

Based on the observation on the facility usage aspects, the visitors said that Karebosi field as public space does not have identity, landmark, and characteristics that visually can be remembered easily and known in the area. It is contrary to theory in [7] that says the easiness for someone to recognize and understand the main elements and the relation in an environment which causes the person to find a way or direction. As public open space, the visitors said that visual access of Karebosi environment is not enough. It still seems closed to the environment around, and it is contrary to the principle that every public space has a meaning as location designed and has huge access to the environment around [9, 10].

As public open space that needs open access, the visitors argued that the development of stalls PK.5 which covered along R.A. Kartini street limits the visitors' view to see the condition of the environment from outside and inside Karebosi field area. It contrasts with Weisman's theory [7] that says the ability to see the object aimed without being blocked visually.

b. The scope of interactive dimension

Based on the observation of interactive dimension, after a review based on the parameter quality theory of social interaction in public space, some conclusions are obtained.

Based on observation of social aspects, the facilities and infrastructures are considered to be not optimal in facilitating the diversity activity of social interaction in Karebosi. It contrasts with the White theory [11] that says the success of a public space can be seen by social interactions, facilities, and infrastructures.

As public open space, Karebosi does not have public spaces' elements that designed interestingly so that it attracts the visitors' reaction to observe and comment. It can stimulate the fellow visitors to interact in public space. The condition is contrary that concerning the environment's characteristics that stimulate social interaction of sensory stimulation that is the quality and intensity of the sensory as the experience felt by human sense [7].

A flurry that happens continually can increase social interaction in public space. As public space, Karebosi field has flurry in which the intensity is increasing at the weekend. It is in line with successful aspects of public space that activity is the feeling of the intensity existence on behavior that happens continually in an environment [7].

Based on the observation on diversity activity aspects as public space, Karebosi field is considered to be not optimal in giving service of social interaction activity needs for people. It can be seen in the diversity of interaction choices for the visitors in which the amount is still minimum. It contrasts with Mehta [12] in relation to social activities implementation in public space. It depends so much on the variation of usage, which is measured based on the diversity or the number of typology activities implemented outside.

Sports facilities are quite successful in facilitating the interest of different types of community to exercise. The activity that happens in Karebosi commonly is sport activity with the number and condition of facilities that quite enough, so it attracts people's interest to visit Karebosi. It is in line stated that the success of a public space can be seen from the diversity of the users who are having activities in the area [11].

c. The scope of structural dimension

Based on the observation on structural dimension of personal assessment aspects by questionnaire from data validation processes through actual score comparison to ideal score, the percentage of respondents responses are as follow:

$$\frac{Actual \ score}{Actual \ score} \times 100\% = \frac{7632}{12500} \times 100\%$$
$$= 61.056\%$$

The quality of public space can be considered successful if the total percentage of the statement of 60.89 %, in which it is in the success range of 60 - 79.9 %. Generally, based on questionnaire and interview methods, seen by the visitors' behavior, the sports facility is quite successful to give meaning and interest of Karebosi field as public space and attracts people' interest to exercise in Karebosi. However, the visual facility condition which is covered from surroundings is not attracting the visitors to stop by and do activities in Karebosi. As public space, the facilities in Karebosi do not have facility design that could give meaning and impression for the visitors which can stimulate the diversity interaction increasing of fellow visitors.

3.3. The correlation of visitors' attitude and behavior response to the condition of surroundings

Based on the personal assessment aspects of environmental management, some conclusions are obtained:

a. The scope of subjective dimension

Based on the observation of accessibility, the similarities of response on visitors' attitude and behavior to the facility condition are obtained, even though based on theory and questionnaire measurement visually the quality of access design of Karebosi field is not fully ideal, yet generally, the visitors are quite satisfied with the facility services provided in Karebosi. It can be seen by the routine of the visits to the location. Likewise, the utility of the facility as well as the condition of supporting facilities has been supportive generally.

b. The scope of interactive dimension

Based on the scope of interactive dimension, there is a similarity in the visitors' attitude and behavior response to the facility condition. Based on the literature review of main facility condition seen by the intensity of sports and interactions happen regularly, the sports facilities in Karebosi field is considered to be successful to facilitate and stimulate the increase of physical health and interaction activity for the visitors. Yet the condition of the surrounding is still not conducive. As a public facility, Karebosi field is considered to be not optimal in facilitating the types and diversity of facility choices which can stimulate the improvement of social interaction quality for the visitors.



Figure 11. The situation of environmental planning of the facilities



Figure 12. The situation of site plan planning and the attributes in the location



Figure 13. The situation of environmental carrying capacity of facilities



Figure 14. The wide area carrying capacity on facilities



Figure 15. The routine of lively activities on location

c. The scope of structural dimension

An assessment of visitors to the overall condition and management of the facility to improve the quality of public open space services.

Based on the scope of structural dimension, there is a correlation between the facility condition, the response of behavior and the response of attitude. Through an interview with some of the visitors, it can be concluded that

(1) They agree that the condition of environmental design is not interesting. This is not following the theory of passive attachment by Stephen [13] that says passive attachment to the environment can be presented through elements of observation, scenery, public art, performances and attachment to nature that can be fulfilled for visitors who do passive activities.

- (2) Supporting facility of interaction such as landscape planning, park design, the characteristics of public area, and the condition of seat facilities which are not interesting.
- (3) They agree that the orientation of development trade facilities in the location is too huge compares to the visitors' needs. This is contrary to the stimulus theory that says influences social interaction on congestion is the feeling of density in an environment [7].
- (4) They intensely visit Karebosi field area because of the wide of facility area which can make the visitor feel spacious while they are doing some activities in it so they can exercise optimally.
- (5) Elderly visitors stated that they feel comfortable for a shady environment and the quality of the oxygen which is quite good because there are a lot of shady trees surrounding Karebosi field area. This is in accordance with Carr's theory [12] that says the comfort of public spaces is influenced by environmental comfort in the form of protection from natural influences such as sunlight, wind; (physical comfort) in the form of availability of adequate supporting facilities such as seating; (social and psychological comfort).
- (6) Teenage female visitors feel happy for shady environment, but they feel happier because they can do gymnastics after jogging. This is following relaxation theory. In urban public space settings, elements of nature such as trees, plants, and water can make the body and mind more relaxed [13].
- (7) According to most visitors, they think that the jogging facility in Karebosi is the best in Makassar. The jogging track has an ideal track and a long range.
- (8) Male teenagers intensely visit Karebosi due to the lively atmosphere of sports activities. There are three soccer fields provided and a jogging track area which makes them feel comfortable and more energetic to exercise.
- (9) In the Karebosi field area, we can gather and play soccer with friends (Student, 19 years old).
- (10) "I like to visit Karebosi because it is one of cool places for " (Student, 25 years old).
- (11) "My intention to visit Karebosi in the morning is because the fresh air since there are a lot of trees in here" (Entrepreneur, 45 years old).
- (12) The situation that can stimulate visitors to interact in Karebosi is the convenience of talking to visitors who have the same hobbies and activities. This is following a theory on the aspect of comfort in public spaces (livability) is the comfort of staying or the sense of comfort to live or move in the region [3].
- (13) The convenience of paying attention to the crowd of the visitors who have activities in Karebosi. The intensity of activities happen in the field can increase the visitors' energy to exercise. This is following the theory of Weisman [7] that says activity is a feeling of the intensity of behavior that is continuous in an environment.

4. Conclusions

The condition of facilities and activities provided in Karebosi is considered to be quite successful in facilitating people's needs in doing their activities on public space, it can be seen by intensity levels and routine visits of the facility which happen consistently and continually. Yet as public open space, the orientation of facility development and the different types of activities in Karebosi have not been running in balance. Service quality in sports activity is not balanced by the increase of service on interaction activities. Based on this case, it can be concluded that Karebosi field has not been able to provide a conducive interaction service facility for people to interact in Karebosi. Karebosi field area as the representative of public space in Makassar is considered to be unsuccessful to create the diversity activity of social interaction in public area.

Facility and activity services provided in Karebosi field are quite successful to attract people interest to do some activities and interact in Karebosi. However, as public space, the carrying capacity of the facility is not fully ideal. The success rate achieved was still at 61.056 %. People quite satisfied with the condition of Karebosi nowadays. Yet they still complaining about the lack of carrying capacity of the facility. They stated that the condition of facility in Karebosi is not conducive to do interaction activities. The facility of the public area has not been able to provide various choices for interaction activities. Generally, as a public area, the facility design and activity scenario of the public area has not been able to present various entertainment and impression for the visitors.

As a public area, Karebosi is quite successful to increase people's participations on public area, yet the success was still at 61,056%. Generally, the convenience is gotten by the visitor through the environment carrying capacity which is quite ideal because it is supported by oxygen quality and the coolness of the temperature obtained from a shady place in Karebosi. The convenience of social interaction in Karebosi field is based on the crowd of the visitors who have activities and tend to have the same hobbies. The crowd in Karebosi is caused by the convenience of sport facility service in Karebosi supported by comfortable environmental conditions and the quite ideal of scale facility. The number 39.044 were obtained from not optimal carrying capacity of physical design. The orientation of facility development has not been optimal to stimulate the increase of social interaction in public area. Karebosi field area is considered to be unsuccessful to be a public area that provides various needs and activities of the people who have different purposes and needs.

Recommendation

This research can be an input for the government to decide the orientation of facility development in Karebosi in the future. As a public area which is the representative of the public area in the city, the government should be able to design a conducive and interesting public area for the communities. Karebosi field area needs to get a better visual design for the area. By the aspects of environmental design quality, it is better for the government to designing in landscape which is completed by interesting design of public space attributes that functioned as identity and characteristics that could increase the visual beauty so that the public space could fulfill the need of entertainment and also have meaning as refreshing facilities for the visitors.

This research can be an input for the manager to be more creative in creating the scenario of the area which could give entertainment and refreshing facilities for the visitor. The intensity of social interaction of fellow visitors can be increased by providing a conducive area to seat and for having a conversation which is connected with friends that are designed interestingly, providing a playground for children and providing water fountain which can increase the visitors' interest to sit and interact each other.

This research can be the first step to do the next research related to the determination of design definition that can be a reference for designing facilities of the public area in an urban area in the future.

References

- [1] Karen Malone in children, Youth, and sustainable Cities, Local Environment vol. 6 No. 1(2001).
- [2] Sauter, D. Huettenmoser, M.2008. liveable Street and Social in clusion-urban Design. International Volume 13.
- [3] Carr, et. all dalam Carmona (2003). Public Place-Urban Spaces, The Dimension of Design. Burlington : Arcitektural Press.
- [4] Parkinson, John. 2012. Democracy and public space. Oxford University Press.
- [5] Sirvani, Hamid (1985). The Urban Design process. Van Nostrand Reinhold: New York.
- [6] Rustam Hakim, Hardi Utomo, Component of landscape architecture design [in Bahasa] (Jakarta,2003), hal 50.
- [7] Weisman, J, 1981. Modeling Environment Behavior Sistem. Journal Of Man Envirronment Relatition Persilvania. USA.
- [8] Sauter, .D. Huettenmoser, M.2008. liveable Street and Social in clusion-urban Design. International Volume 13.
- [9] SC Ruton, Roger, 1984. Public Space and The classical Vernacular.Singapore: The Public.
- [10] White, F, William, 1987. The American Sociologist Vol .14. No.1(Feb, 1978), PP. S6-66. New York State School Of Industrial and Relations.
- [11] Mehta. 2007. A toolkit for performance measures of public space. 43rd ISOCARP Congress 2007.
- [12] Carr, Stephen et al. 1992. Public space, new York: Cambridge university.
- [13] Sirvani, Hamid (1985). The Urban Design process. Van Nostrand Reinhold: New York.