

Contribution of Public Parks to Physical Activity in Gated Community in Medan, Indonesia

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Abstract: Public Parks may have an important role to play in facilitating physical activity. They provide places for individuals to walk or jog and many have specific facilities for sports, exercise, recreation, and other vigorous activities. Parks provide places for people to experience nature, engage in physical activity, interaction recreations and relax. The study indicates that the public parks in Gated Community in Medan. Sample cases include public parks in the Cemara Asri of Medan, Indonesia. Methods are observation to document the number, gender, ethnicity, age and activity level of parks users 3 times per day, 7 days per week. We also interviewed 350 park users. The literature reviews on physical activity in public parks deliberately excluded qualitative findings. These studies relied mainly on semi-structured interviews with individuals or in focus groups.

1 INTRODUCTION

1.1 Background

Public park support physical activity through their accessibility; their provisions to facilitate active pursuits; their capacity to provide opportunities to a wide range of users. Parks offer a unique setting within the urban landscape, providing opportunities for physical activity, enjoyment of nature, social interactions and escape (Hayward and Weitzer, 1984). Public park improve our physical and psychological health, strengthen our communities, and make gated community in cities more attractive places to live and work.

Public park also produce important social and community development benefits, They make inner-city neighbourhood more livable, they offer recreational opportunities for at-risk youth, low-income children and low-income families and they provide places in low-income neighbourhood where people can feel a sense of community. Access to public parks and recreational facilities has been strongly linked to reductions in crime and in particular to reduced juvenile delinquency.

Participation in these opportunities is likely to help explain how parks contribute to improving health and wellbeing of users (Sugiyama *et al.*,

2008; Payne *et al.*, 2005; McCormack *et al.*, 2010). Public park users are more likely to achieve recommended levels of physical activity compared with non-users (Giles-Corti *et al.*, 2005; Deshpande *et al.*, 2005; McCormack *et al.*, 2010). Fredric Olmstead, the “father” or Urban Parks, thought parks should be built as places where city resident or gated community could experience the beauty of nature, breathe fresh air and have a place for receptive recreation as well as exertive activities. Public park are also places where people can socialize with friends and neighbourhood. Public park can play a role in facilitating physical activity. Information on who uses public park and what they do there can elucidate the current and potential contribution of parks to physical activity.

In studies of Gated Community in Medan found that walking was associated with access to attractive, large, public open space and respondent uses recreational facilities located near their homes more than facilities located elsewhere.

1.2 The Objective

Many studies confirm all benefits of public parks in gated community, such as physical activity, facilities recreationality, health, social interaction, and economic value. The objectives of the study is to identify contribution public park to activity physical

of the gated community in Medan as the indicator of the successful of the place. The study aim is to get explanation of how the public park in a gated community gives a quality of life contribution to the public life In Medan. Studies Objectively examined what activity occurs in public park. To what extent do public parks play a role in reducing sedentary behavior and what characteristics of parks are most important for physical activity?

1.3 Public Park in Gated Community

The gated community rises from a culture of fear of the middle up income urban people to many criminal threats. The condition then forces a segregated community (Boyers and Manzy, 2006).Public Park or public open space in a gated community is one of the facilities for resident for their social interaction needs (Aulia and Ismail, 2013). When the community outside the gate can access the public services, it becomes a privately-owned public space. The privatized public park or public space can be a mall, café, sports facility and theme park (Nasuiton and Zahrah, 2011).

1.4 Benefits of Public Parks and Park Use

Public park facilities and services offer various opportunities to fulfill individual, social, economic, and environmental benefits. Some of these opportunities benefits an entire community, not just public parks users. The focus of this study is on the health benefits that are obtained via physical activity in parks, others important benefits of park use (such as physiological, social, economic and environmental benefits) must also be acknowledged.

2 METHODS

The location of the study is public park in Medan; namely: Cemara Asri. The parameter is determining the life of public park needs both the physical data a visual survey to record the element of the physical activity and activities occur, access point, the circulation path, outdoor setting, parking lot, street furnitures, the street vendors and observes recorded all activities in the setting and behavioural mapping method. The perception data through an interview that based on a questionnaires; consist of a question about socio-economic background, frequency visits, namely, access, comfort, uses and activity. The respondent where people that were doing their

activities in public park and chosen randomly in the access point of the public park. We also interviewed 350 park users. Observations were conducted in all target areas during 1 hour time periods beginning at 8.00- 11.00 AM, 12.30-15.00 PM, and 15.30-17.00PM. Surveys conducted face to face interviews with park users and neighborhood community only persons over 15-70 years of age were eligible. Study selection to be considered for this review, studies must have:

- Reported using at least one qualitative research method
- Examined urban parks either exclusively or in addition to other recreational settings
- Examined public park use or park based physical activity behavior in any form (sports,walking,exercise and playground use).

3 RESULT AND DISCUSSION

3.1 Respondent Characteristic

CemaraAsri, Medan	
Sex	Male (55%) Female (45%)
Age	15-20 (18%) 21-35 (25%) 36-50 (34,5%) 51-70 (22,5%)
Vehicle ownership	Walking (15%) Car (22%) Motorcycle (43%) Public Transport (30%),
Montly Expenses	< 5 juta IDR (65%) >5 juta IDR (35%)
Distance from home	<1 km (20%) >1 km (80%)
Activity	Sitting/Picnicking 50% Playing/Playground 35% Sport 15%

3.2 Park Facilities and Activities

Public park	Facilities	Activities
Public Park	Planters Seating Vegetations Vendors stand Stable Playgrounds Jogging track Landscaped Picnic areas	Walking Sitting Recreation Interaction Sport Playing Talking sport

Public park in Cemara Asri have recreation center for 3 picnic areas, 2 park had running tracks. Public parks provided programming, such as after-school events for children and adolescents, daytime children programs such as basketball or playing ball/softball fields, 20-35 vendors stand and many planters for landscape area.

3.3 Observed Public Park Use

We observed an average of 350 persons. More males were seen in public park than females (55% vs 45%) and they outnumbered females in all public park areas except playgrounds and the track, where the numbers were about equal. Fewer than 15-20 (18%) were children; 21-35 (25%) teenagers and young people; 36-50 (34,5%) adolescent and 51-70 (22,5%) were adults. The most common coded were sitting or picnicking (50%), followed by sporting (15%) and using the playground (35%). There were many time periods during which park areas went unused. Most facilities were less used in the mornings, with the exception of the track.



Self-reported Park Use:

The Interviews, ublic park users and residents living within a 1-5 mile radius of the public park. The response rate was 55% among public park users and 45% among residents. More public park than neighbourhood residents visiting the public park per week (75% vs 25%), was sitting (60% vs 40%). Walking (75% vs 25%), Playground (55% vs 45%), Sport (15% vs 75%). Provide more public park events and fairs (45%), and improve landscaping (50%).

Perceptions of Safety and Park Staff Performance:

Users of Public park said they felt safe in the public park, but this varied considerably by public park. Nearly user (80%) living near the public park. When asked what public park features they

would like to see improved, 20% identified concerns about safety in their top 5 request.

3.4 Attributes Associated with Public Park and Physical Activity

3.4.1 Features

Several features of public parks positively and negatively influenced park use, although the importance of these features differed according to the characteristic of the study samples. Children and adolescent indicated that access to a variety of facilities in public park that supported active and passive recreational activities including those for structured and unstructured activities were important. Facilities that supported children play such as playground areas. Public park contain a wide variety of features that lend themselves to different types of usage. Future studies can then access relationships between certain types of activity and specific features. Some of the major park characteristics that may influence park use are the physical components, or on-site characteristic, of a park. These park features include facilities, programs and diversity. Facilities refer to the physical facilities that are available to users, such as vendors stand, planters, picnic chair and table or security lighting, etc.

3.4.2 Conditions

Public Parks users are likely to visit where the features are maintained on a regular basis and shun those places containing elements that are in disrepair. Another important aspect of the condition of parks is the safety of the equipment. Several studies have highlighted the inadequacies of playground equipment that have led to injury and even death. The condition of play equipment is likely to factor into parents decisions to let children play in certain parks when properties are poorly maintained. A message is sent that there is a breakdown in accepted civil behavior. In particular, characteristic of playing surfaces or cleanliness within parks were regularly identified as important among adults and children alike.

3.4.3 Accessibility

Access is defined as the ability of people to get to and navigate within a public park. Four (4) categories of access are considered here: availability, equitable access, individual access and within public park access. Good quality public park may not be

present in sufficient numbers in cities to be accessible to all people. Access within a public park refers to the ability of people to move around easily inside the boundaries of public park. Perceived access should also be considered given that perceptions of inaccessibility may inhibit public park activity behaviours. Generally, having more public park within walking distance was positively associated with park use, while the necessity of driving to reach a public park often deterred use. Access to public transportation was also identified as an enabler of physical activity for some.

3.4.4 Aesthetics

Positive attributes of public parks also included the presence of tree and bushes, gardens, grass, flowers, natural settings and water features. Air quality and the presence of distinctive smells in public park contributed to public park aesthetics. Those spaces are very important. It is good to spend time out in fresh air when you are studying and have a break from it. The category of aesthetics incorporates the perceived attractiveness and appeal of the various design elements of a park. Having something beautiful or interesting to look at while exercising or visiting a park can be a powerful motivator of physical activity. Aesthetics also considers how the physical features of a public park are laid out. Some design characteristics are amenable to change over time, while others are fixed at the initial public park planning stages. Some important design issues include the size of public park, its lay out landscaping, the balance between sun and shade, topography, ease of access, visual appeal and others aesthetic features such as ponds or sculptures.

3.4.5 Safety

Specific public park attributes identified as influencing safety from crime included the presence of lighting, presence of law enforcement, increased security and surveillance, presence of homeless and drug users/dealers and the presence of secluded paths and areas. Park attributes related to safety from injury included the presence of glass, syringes, rocks, debris, heavy traffic and others users of paths. The physical attributes of public park seemed to be inextricable from perceptions of them as either safe or unsafe.

3.4.6 Sociability

Social and physical environments appear to inform one another in ways that influence public park-based

physical activity. The direction of influence may be negative and positive.

Nasution, A.D.N., Zahrah, W., 2015. The Space is Not Ours, The Life of Public Open Space In Gated Community In Medan, Indonesia. www.Elseiver.com/locate/cities1877042

4 CONCLUSION

Public park a critical role in facilitating physical activity in minority communities, not only by providing facilities, supervised activities, but also by providing destinations to which people can walk-even though they may be sedentary after arriving there. This research found that public park inside a gated community could stimulate public life. This research too has proposed a conceptual model to guide thinking and suggest hypotheses about relationships between public park benefits, public park use and physical activity level, as well as the antecedents/correlate of public park use.

Effective collaboration between public park professionals, park and recreation planners, sociologist, psychologist, economist, urban planners, architects, landscapers and public safety officers is needed to design feasible interventions and enhance public park based physical activity levels.

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