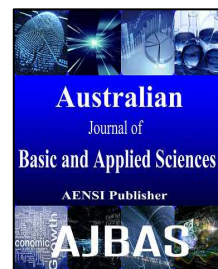




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Evaluation of Physical Factor Affecting Decision for Creating the Active Community Centers: The Case of Malaysia

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ABSTRACT

Access to the Community center has widely been identified to be one of the most a significant aspect in community design and planning towards better quality living. Although, the Malaysian community centers are not being used effectively and these have been faced with lack of participation. Based on this problem, This study conducted to identify the physical principles for formulating a framework to access the active community center. It was aimed to compare the result of the scientific analysis with the user responses from the community centers' user. For this purpose a questionnaire survey was conducted among four community centers of Kuala Lumpur. In order to evaluate the current condition of Malaysian community center, the questionnaire was prepared based on physical factors. These physical factors contain two main principles: the first was the accessibility of the community center and the second was about physical condition of the building. The results indicate the level of user evaluation in terms of physical factor which are provided in Kuala Lumpur community centers. The approach to investigate the physical factors of community centers in this study can be applied to even different types of public space. The results and improvement suggestions are suitable for other research, for the quality of public space and life in the community center.

INTRODUCTION

Access to the Community center has widely been identified to be one of the most a significant aspect in community design and planning towards better quality living. As the interest in the quality of life has been increased among human being, the significance of free time and community is being highlighted; eventually, the concepts of leisure facilities and community centers have been entered (Lotfi, Sedigheh, and Mohammad Javad Koohsari, 2009). So, People need to have a common place in order to communicate with others and spend their leisure time in their residential area (Jafari, Nastaran, and Nangkula Utaberta, 2015).

A community center should be regarded as an essential amenity of normal community living in normal circumstance (Smith, M.K., 2002). Today's, many studies focus on different aspect of community center, but there is slight study regarding physical factor in the community center. According to DBKL (2004), the design of the community center provides a hall, which can be used at any time for recreational activities or social gathering. These community centers do not meet with people's aspiration and choices which are being more diverse. The design should reflect generally the changing needs and growing expectations of the people (Kuala Lumpur City Hall, 2004). So, there are various issues concerning the provision of these local facilities and public facilities, especially in developing countries like Malaysia. Most of the time, the issues revolve around quality and catchment area and accessibility (Nurul, Wan, Mardiah Wan and Mohd Rani, 2014).

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This paper evaluates the current condition of Malaysian community centers in terms of physical factor in order to introduce physical principles for formulating a framework due to access the active community center. In this paper physical factor presents by accessibility and location and building condition.

In general, having a public evaluation in the desirable community center has significant impacts on attracting participation. Indeed, the findings from this study will provide bases for formulating a design framework for responsive community centers in the future.

2.0 Literature Review:

2.1 Community Center:

Interacting populations of several kinds of persons in the common location with the common interest has been introduced as a community center (Merriam, 2008). A community center in the most of the countries is being used place as social welfare, social interaction, recreational events, cultural programs, religious activities and moral development of people, interest based courses, library and meeting spaces that benefit the local community (Broady, M., *et al.*, 1990; Fisher, R., 1994; Xu, Q., *et al.*, 2006).

2.2 Physical Factors:

Professional design as physical properties that contribute to the quality of a community center, which play a more influential role in development and usability of successful community center. So, physical factor in this thesis conclude accessibility and building design (Smith, *et al.*, 1997).

Accessibility: Accessibility to the community center as public space can have an important role as one of the factors in terms of the physical dimension of the spaces and can be linked to use of public facilities (Vandenbulcke, G., *et al.*, 2008). Many researchers acknowledged that having greater access to the community center as a recreational facility has increased the likelihood of being active (Leslie, E., *et al.*, 2005). Accessibility has been demonstrated that as the ease with which activities can be attained from a certain place and with a certain system of transport (Johnston, J., *et al.*, 2011). Regarding the positive relationship between the accessibility of public space and utilization, a well-used public space has located in a neighborhood. In addition, it has been located proximity to residential units, next to other public uses and public building which has good visibility from the street (Yasmin, F., and D.G.A. Parvin, 2008.). It should be light, comfortable, appropriate and rapidly recognizable. The best situation is to be sited close to the main roadways, on a main thoroughfare in close proximity to public transport stops in order to use the greater service area as well as more suitable and easy access directly to the location (Pasaogullari, N., and N. Doratli, 2004). When the services and facilities located closer to home are more likely to be reached by foot or bicycle (Glover, T.D., 2004). Where access possible, community centers should be within walking distance. The suggested distance is 1.5 km -2, 25 km. Where it is not possible to provide the facility within walking distance it should be within 5 minutes walking distance of public transport stop. A maximum travel time of 20 - 30 minutes is recommended. To sum up, accessibility not only is not ineffective, but also, is significant for enhancing the strength of the area for action of absorbing individual to visit that are physically related to the space for shopping and leisure time acting (Gavin Tunstall, 2006).

Building Design: The quality and value of architectural designs have been a matter of debate since the ancient Greeks organized a design competition in 448 BC for the design of a war monument at the Acropolis. Nowadays, there are buildings with mixed usage such as: combining commercial, leisure, educational functions and unneeded buildings being converted to appropriate current requirement by changing their use (Utaberta, I.N., *et al.*, 2010). Finally, these can be sorted into the following wide series: Ventilation and Lighting, A comfortable building is not only determined by building quality and the number of spaces required by the user. One factor needs to consider is the influence of the building is the ventilation of space (Prianto, E., *et al.*, 2000). Researches on hot and humid weather are limited. Utaberta *et al* (2010) emphasized that; the local community centre design should fully utilize the natural resources. Due to the strategic location of Malaysia, the weather is humidity and hot along the year (Utaberta, I.N., *et al.*, 2010). With the existence of this environment, a natural ventilation is available naturally without using any source of artificial assistance. Another important dimension in community center design is the size and floor space for each part of the community center. In community center; the floor space should have sufficient area to incorporate the vast of people, so the floor space and size of each space play a significant role in the community center (Yasmin, F., and D.G.A. Parvin, 2008). Appearance Each element in the elevation has its own visual strength or weight because of its size or colouring, resulting in some elements being more dominant than others. The roof and the wall are major elements, the windows less so. Structures and finishes have a visual impact and can be seen on both external and internal environments. The appearance of materials may be finished or decorated, naturally and will certainly change over time (Gavin Tunstall, 2006). Furthermore, the exterior of the public environment impacts its user and in plenty of cases may be progressed. So, the visual appearance of any designed product is clearly of fundamental significance because it is the first and lasting impression of the product, often establishing and sustaining its perceived merits.

3.0 Methodology:

In this study, a quantitative methodology was chosen and applied to study of the people's evaluation and perception toward using community center. The suitability of quantitative methodology via introducing it as scientific elicitor of phenomena related using numerical data was declared (Muijs, D., 2004; Thomas, R.M., 2003). The data were gathered from the questionnaires which were distributed among 330 the local residents in four regions of Kuala Lumpur city. The questionnaire was designed according to physical factors which effectively contribute to the usability of the community center (the factors are shown in table 1). A five-point Likert-type scale was used. Then, the obtained data were accumulated and analyzed by SPSS software. As the main objective focuses on participant's evaluation, the collected data would be shown in numerical and statistical analysis.

RESULTS AND DISCUSSION

In this part, gathered data through the questionnaire will be discussed, including the participants' evaluation toward physical factor in the four Malaysian community centers. The objective of this study is inception of people evaluation, find and analyze it to explore what people like about their community center regarding physical factor.

Table 1: Descriptive Statistics for Evaluation of physical factor

Variables		Mean	Std. Deviation
Accessibility			
Easy to access from main road	330	2.98	1.40
Access by public transport	330	3.10	1.54
Easy access from residential area	330	3.60	1.25
Easy to find the location	330	2.69	1.45
Highly accessible from surrounding public building	330	2.27	1.21
Building Design			
Size of community center	330	3.20	1.38
Appearance	330	3.60	1.17
Form of building	330	3.43	1.31
Good condition of ventilation and lighting	330	2.51	1.21

Table 1 Shows the Mean analysis of the participant's evaluation toward physical factor. Physical factors include accessibility and building design as sub-variables. Based on participant's evaluation, the majority of people did not agree with the current accessibility condition. According to this table in terms of accessibility categories, the highest mean score is 3.60 for 'Easy access from residential areas (sd = 1.25)'. Followed by 'Access by public transport (mean=3.10, sd = 1.54)', 'Easy to access from main road (mean= 2.98, sd = 1.40)', 'Easy to find the location (mean= 2.69, sd= 1.45)'. While the lowest mean score is 2.27 (sd= 1.21) for 'Highly accessible from surrounding public building'. Therefore, except of 'Easy access from residential areas', participants did not agree with the 'Access by public transport', 'Easy to find the location' and 'highly accessible from surrounding public buildings (see Table 1).

As can be seen in the table 1 based on building design, Appearance (mean= 3.60, sd= 1.17) is received the best condition among the other factors and participant are agree with the appearance of these community centers. The second position is allocated to 'Form of the building (mean=3.43, sd=1.31). Meanwhile 'Size of the community center (mean=3.20, sd =1.38)' and then 'Good condition of ventilation and lighting (mean=2.51, sd=1.21)' in these community centers are collected the worst condition among others. So, except of appearance, people did not agree with the form, size and condition of ventilation and lighting in these community centers (see Table 1).

Conclusion:

Recently, the people's expectation has been increased about the quality of their life. So, there is a demand of more facilities to fulfill this requirement. Nowadays, in developed countries community center has a critical role to promote the quality of life. Although, Malaysia is rich of community centers, but there are not underutilized. These community centers are faced with a different kind of problem. The main problem belongs to physical factor. So, this study tries to evaluate the physical factor physical principles for formulating a framework due to access the active community center. Based on this study, physical factors are divided to accessibility and building design. A community center should prepare a situation for easy to access from the main road, easy access by public transport, easy access from residential areas, easy to find the location and highly accessible from surrounding public building regarding accessibility. In terms of building design, 4 factors were investigated: size of building, appearance, form and ventilation. in a community center size, appearance, Form of building and Good condition of ventilation

So, in order to evaluate the current condition of the Malaysian community centers in terms of physical factor, the survey questionnaire was conducted among 330 participants who were user of community center at four Kuala Lumpur community centers. Totally, participants were not satisfied with the current condition. Therefore, in terms of accessibility, except of 'Easy access from residential areas', participants did not agree with the 'Access by public transport', 'Easy to find the location' and 'highly accessible from surrounding public buildings. Regarding to building design, except of appearance, people did not agree with the form, size and condition of ventilation and lighting in these community centers. Finally, community is not satisfied with the available Malaysian community center and they are needed cover the physical factors.

This study will contribute to City Hall architect, planners and urban designers who are in charge of the community center design to reconstruct and redesign better community center in Kuala Lumpur, Malaysia.

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REFERENCES

- Broady, M., R. Clarke, H. Marks, R. Mills, E. Sims, Smith, M. Community and L. White, 1990. *Enterprising Neighbours. The development of the association in Britain*, London: Bedford Square Press.
- Fisher, R., 1994. *Let the People Decide. Neighborhood Organizing in America*, New York: Twayne Publishers. Temple, P. (2008).
- Gavin Tunstall, 2006. *Managing the Building Design Process* (Second Edi., pp: 197-206). Elsevier Ltd.
- Glover, T.D., 2004. The "Community" Center and the Social Construction of Citizenship. *Leisure Sciences*, 26(1), 63–83. doi:10.1080/01490400490272486Xu, Q., Gao, J., & Chung, M. (2006). *Community Centers in Urban China*, (October 2013), 37– 41. doi:10.1300/J125v13n03
- Jafari, N. and N. Utaberta, 2015. "Identifying Functional Factor for Developing the Community Centre in Kuala Lumpur," *Appl. Mech. Mater.*, 747: 141-144.
- Jafari, N., N. Utaberta and N. Jafari, 2014. "EVALUATION OF IMPRESSIVE FACTORS FOR DEVELOPMENT OF MALAYSIAN COMMUNITY CENTERS," in *Architecture and Design for People & Society Conference (ADPS 2014)*, p: 204.
- Jafari, Nastaran, and Nangkula Utaberta, 2015. "Identifying Functional Factor for Developing the Community Centre in Kuala Lumpur." *Applied Mechanics and Materials*, 747: 141–44. doi:10.4028/www.scientific.net/AMM.747.141.
- Johnston, J., M. Szabo and A. Rodney, 2011. Good food, good people: Understanding the cultural repertoire of ethical eating. *Journal of Consumer Culture*, 11(3): 293-318. doi:10.1177/1469540511417996
- Kuala Lumpur City Hall, 2004. *KUALA LUMPUR STRUCTURE PLAN 2020*.
- Leslie, E., B. Saelens, L. Frank, N. Owen, A. Bauman, N. Coffee and G. Hugo, 2005. Residents' perceptions of walkability attributes in objectively different neighbourhoods: a pilot study. *Health & Place*, 11(3): 227-36. doi:10.1016/j.healthplace.2004.05.005
- Lotfi, Sedigheh, and Mohammad Javad Koohsari, 2009. "Measuring Objective Accessibility to Neighborhood Facilities in the City (A Case Study: Zone 6 in Tehran, Iran)." *Cities* 26(3): 133-4 doi:10.1016/j.cities.2009.02.006.Chanter,
- Merriam, 2008. *Webster Online Dictionary*. www.merriamwebster.com/dictionary/community Retrieved on.
- Muijs, D., 2004. *Doing Qualitative Research in Education with SPSS*. London: SAGE Publication
- Nurul, Wan, Mardiah Wan and Mohd Rani, 2014. "American Transactions on Engineering & Applied Sciences Understanding the Usage Pattern of Local Facilities in Urban Neighbourhood towards Creating a

Livable City.” American Transactions on Engineering & Applied Sciences, 3(2): 129-48.

Pasaogullari, N., and N. Doratli, 2004. Measuring accessibility and utilization of public spaces in Famagusta. *Cities*, 21(3): 225-232. doi:10.1016/j.cities.2004.03.003

Prianto, E., S. Houpert, P. Depecker, A. Nantes, De, and R. Massenet, 2000. Contribution Of Numerical Simulation With Solene * To Find Out The Traditional Architecture Type Of Cayenne –. *International Journal on Architectural Science*, 1(4): 156-180.

Smith, M.K., 2002. “Community Centres (Centers) and Associations: Their History , Theory , Development and Practice.”

Smith, Tara, Maurice Nelischer and Nathan Perkins, 1997. “Quality of an Urban Community: A Framework for Understanding the Relationship between Quality and Physical Form.” *Landscape and Urban Planning*, 39(2-3): 229-41. doi:10.1016/S0169-2046(97)00055-8. Smith, R. (2003).

Thomas, R.M., 2003. *Blending Qualitative and Quantitative Research Methods in Thesis and Dissertations*. United States: Crowin press Community Centers in Urban

Utaberta, I.N., A. Nur, A. Goh and N. Spalie, 2010. Evaluating Spatial Use And Design Development Of “ Modern ” Community Centre In Malaysia. In “Empowering Modern Asian City Makers, pp: 1-19.

Utaberta, N. and N. Spalie, 2015. “Understanding the Potential of Modern Community Center as Social Architectural Spaces in Malaysia,” *Appl. Mech. Mater.*, 747: 52-55.

Vandenbulcke, G., T. Steenberghen and I. Thomas, 2008. Mapping accessibility in Belgium: a tool for land-use and transport planning? *Journal of Transport Geography*. doi:10.1016/j.jtrangeo.2008.04.008. Syamilah, B.Y. (2006).

Xu, Q., J. Gao and M. Chung, 2006. Community Centers in Urban China, pp: 37-41. doi:10.1300/J125v13n03

Yasmin, F., and D.G.A. Parvin, 2008. Community Centers for Community Development : A Case Study of Dhaka City. *Jahangirnagar Planning Review*, 6: 125-133.