Effectiveness of Gated Communities in Providing Safe Environments for Children’s Outdoor Use

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Abstract

Due to the safety factor, children use of the outdoor spaces in the urban neighborhood is rather limited. As easily-targeted victims, it is important for children to be safe while using the outdoor spaces. Since a gated community is generally referred to as a residential community with access control and guarded area, more young parents choose this type of neighbourhood to bring up their family. Focusing on high-rise residential gated community, this paper aims to evaluate the effectiveness of gated communities in providing a safe environment for children to use the outdoor spaces within it. Seven elements that relate to safety in a gated community are identified based on the literature review and extensive observations. These are measured and tested through a combination of survey questionnaires, in-depth interview and unstructured observations to investigate the influences of these elements in shaping parents’ perceptions of safety and the children’s use of outdoor spaces. The results revealed that the parents’ perceptions of safety on these elements have direct influence on their children’s use of the outdoor spaces in a gated community. Parents are also affected by the sense of community of their neighbourhood when making decisions involving their children. The findings of the study regarding the parents’ concern for their child’s safety in the outdoors of gated communities raise questions about the effectiveness of a gated community in providing a safe environment for the children and the impact of the children’s physical and mental developments.

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Selection and peer-review under responsibility of the Organizing Committee of PSYSOC 2013.

Keywords: Gated Community; parents’ perception on safety; parents’ supervision; children’s outdoor use;

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1. Introduction

A gated community is the latest trend in the supply of residential units in the urban areas. This is due to the increasing concern among urban dwellers on the safety levels of the housing environment as a result of rising crime rates in those areas. In recent years, crime rates in Malaysia have increased steadily (Mohit and Hannan, 2010). There was a rise of nearly 3% in the overall crime rate index from 2006 to 2009 (Government Transformation Program, 2010). Almost 90% of the crimes in Malaysia were property crimes involving residential units (Sidhu, 2005). The ‘Safe City Program’ (SCP) in Malaysia launched by the Federal Department of Town and Planning in 2004 focused on creating a safe urban environment due to the decrease in quality of life and increased overall economic cost of crime (Government Transformation Roadmap, 2010). The Malaysian Quality of Life Index from 1990-2004 recorded a negative percentage of change of -21.5% for public safety. An amount of RM3.7 billion was allocated for crime prevention programmes in the Malaysian national budget for 2010 to enhance the efficiency of security personnel that included the provision of modern and sophisticated security equipment. The aim was to achieve a target of 5 percent at the end of 2010 on crime reduction.

2. Literature review

The review of literature focuses on three main aspects, i.e. theories on gated communities as well as safety, children development as well as the outdoor spaces and the theories on parents’ perception of safety.

2.1. Definition and Theories on Gated Community

A gated community can be defined as a neighbourhood with controlled entrance, walled territory, monitored by security guards and where the communal spaces in this gated area are shared among the residents. The gated communities are regarded as a proper solution able to deter unwanted visitors and traffics to the residential area. According to Halberg (2001), Newman (1996) and Gregory et.al (2013), the primary reason a person moves into a gated community is the perception of higher security.

There are two significant theories that are related to gated communities and crime prevention. One of them is the Defensible Space Theory by Newman (1996) that focuses on three elements; territoriality, natural surveillance and image as well as milieu. It has been claimed that the perception of safety and crime are fundamental aspects that relate to territoriality. Territoriality is defined as the capacity of the physical environment to create perceived zones of territorial influence (Moran and Dolphin, 1986). Territoriality provides a strong perception of safety and makes users feel free from crimes. Natural surveillance, on the other hand, is the capacity of physical design to provide natural surveillance opportunities for the residents; and finally the image and milieu are captured as the capacity of design to influence the perception of a project’s uniqueness, isolation and stigma.

The other theory is Crime Prevention through Environmental Design (CPTED). The basic premise of crime prevention involves the psychological aspects of human nature and the role of external physical environment on human behavior (Robinson, 1996). Timothy Crowe (1991) believes that this concept is to create positive behaviour effects by manipulating the physical environment, which in turn, diminishes offending activities and the fear of crime. The four primary principles in CPTED are territoriality, surveillance, maintenance and target hardening and finally access control. Territoriality is a concept of reinforcing the notion of proprietary concern as well as a ‘sense of ownership’ as legitimate users of space. Surveillance provides the capacity for physical design to promote informal or natural surveillance opportunities for residents and their agents. Maintenance and Target-hardening promotes a positive image and routinely maintaining the built environment ensures that the physical environment continues to function effectively. Finally, access control reduces opportunities for crime by denying access to potential targets and creating a heightened perception of risk in the offenders (Shuhana and Natasha 2013).

2.2. Children’s Development and Outdoor Spaces

Although both indoor and outdoor spaces are considered to be essential in children’s development (Kahn & Kellert, 2002), outdoor spaces are found to have some specific features available to children (Wohlwill & Van Vliet,
According to Moore and Young (1978), compared to the indoor spaces, the outdoor ones have at least three unique features; 1) they provide greatly enhanced opportunity for free exploration; 2) have generally structured character; and 3) the extent of their utilization by children seems to increase steadily with age.

Children’s growth developments (emotionally, physically, mentally and socially) are affected by how they are physically involved with the environment. Within existing research relating to children’s use of outdoor spaces, there is recognition of the general relationship between time spent outdoors and level of physical activity (Veitch, et al. 2007, 2013). Ebberling et al (2002) confirm that greater amount of physical activities is beneficial to children’s health in various aspects, for example, in tackling obesity. Therefore, a stimulating, rich and varied of outdoor spaces is essential in enabling the child to reach his or her greatest potentials (Eriksen, 1985).

2.3. Parents’ Perceptions of Safety and the Supervision of Their Children

The Oxford Advanced Learner Dictionary defines perception as 1) the way you notice things, especially with the senses; 2) the ability to understand the true nature of something; and 3) an idea, a belief or an image you have as a result of how you see or understand something. Schacter, et.al (2011) posits that perception is the organization, identification and interpretation of sensory information in order to represent and understand the environment. In this research, the parents’ perception of safety is defined as how parents feel towards the safety of their children’s use of the communal spaces in the gated community.

Parents’ perception of safety has a close relationship with their fear of crime towards their children. Children within contemporary society have been cast as simultaneously a group to be protected and feared (Matthews and Limb, 1999). Sutton (2008) indicates that societal fears have also impacted children’s use of outdoors – with concern over crime and children’s safety in public space linked with a decreasing amount of time spent by children in the outdoors. In particular, parents’ perception of harm deriving from strangers and road safety are identified as major causes of parental anxiety (Bjorklid, 1994; Hillman & Adams, 1992), and such concerns may cause parents to restrict their children’s outdoor play and autonomous active transport (Loprinzi & Trost, 2010).

Parents’ strict supervision on children’s outdoor use also has a close relationship with the children’s decreasing level of independent mobility. The importance of children’s independent mobility is clear from studies by Rissotto & Giuliani (2006) and Rissotto & Tonucci (2002) who found that children were less equipped with spatial skills and environmental knowledge due to decrease in independent mobility. According to Page et al (2009), studying this potential impact has critical implications for health promotion, as independent mobility is considered an important independence correlation of physical activity for both boys and girls, and may impact their physical, social, cognitive and emotional development (Kytta, 2004). Thus, an environment that promotes greater independent mobility in children may increase their physical activity levels and hence avoid missing out on the health benefits associated with regular physical activity during childhood and adolescence (Janssen & Leblanc, 2010).

3. Methods and Study Areas

This study applied the multiple site case studies as the main method. It was conducted at two high-rise residential gated communities, Site A (Endah Puri) and Site B (Endah Ria), which are located in the suburban township of Sri Petaling, Kuala Lumpur, Malaysia. The sites represent the current trend of gated communities found in Kuala Lumpur, the capital city of Malaysia. It is the largest city with the highest population density in the country. Each of the sites carries a typical system of safety and management of a gated community, but with different site layouts and physical design characteristics. Site A consists of 2 main residential blocks which are laid facing each other whilst the layout of Site B consists of four residential blocks laid in a gridiron block and aligned with each other (Refer to Figure 1).
Most of the communal spaces in Site A (the swimming pool, resting area, and playground) easily accessible by all the residents as they are located in-between the two blocks. These outdoor areas are also situated near the entrance gate. There are underground parking areas and the street level parking areas attached to the blocks. The vehicle routes at Site A are designed around these two blocks. Meanwhile, the location of the communal spaces in Site B is not designed in the middle of the four blocks. They are situated quite far from the other two blocks as these blocks only comprise of the street level of parking area and the underground parking. There is an addition of exercise equipment at the communal spaces of Site B. These communal spaces are also located far from the entrance gate. The vehicle routes at the Site B are designed around every block.

This study applied the mix-method approach as the research design using questionnaire survey, in-depth interview and unstructured observation as its instruments. According to Creswell & Clark (2007), using mixed methods, in which quantitative and qualitative methods are combined, are increasingly recognized as valuable, because they can capitalize on the respective strengths of each approach. The survey was conducted on a total of 141 respondents from Site A and a total of 159 respondents from Site B. In order to assess parents’ perception of their children’s safe use of outdoor spaces, a semi-structured interview schedule was held with 20 parents (10 from each site respectively). All of them were required to have at least one child from the age of six to twelve years old. In cases where parents had more than one child in this range, they were asked to respond on behalf of one randomly selected child. Snowballing technique was used to recruit the further participant parents from the initial parents interviewed. Since parents are the ones who make the final decisions on their children’s living conditions, it is interesting to know their expectations towards the safety of gated communities and the factors that influence their decision to allow their children to use the outdoor spaces. The parents’ supervision was measured from the parents’ approval on their children’s independent mobility. Finally, in order to support the data from the questionnaire survey and the in-depth interview, the researcher applied the unstructured direct observation at the study areas from May through late June 2013 and recorded the location and activities using field notes. In addition, photographs were also utilized to record their behavioural pattern. A cross analysis of the three sources of data was used in the discussions.

4. Findings and Discussions

The results are presented in two aspects; the overall residents’ perception of the safety of the outdoor spaces based on the questionnaire survey conducted at both sites and the children’s use of outdoor space based on the parents’ perception through an in-depth interview as well as unstructured observation of both sites. The findings suggest that there are seven (7) elements of gated community that influence the parents’ perception of safety in children’s use of outdoor spaces. The elements are: Controlled Access (gates), Barriers to define boundaries (fences), Organised Surveillance, Mechanical surveillance, Design of residential blocks, Design of outdoor spaces and Sense of community.

Table 1: Residents’ perceptions on safety if they were alone at the outdoor spaces during the day and at night (Site A and Site B)
Table 1 demonstrates the residents’ perceptions of safety in the outdoor spaces at Site A and Site B. From the table, a higher number of residents in Site B felt very safe if they happened to be alone at most of the outdoor spaces compared to residents in Site A, either at night or during the day. From the interview, 8 out of 10 parents from Site B confirmed that this was due to the strategic location of the communal spaces which were far from the entrance gate. The communal spaces were also located in an open space, with no obstacles to block the natural surveillance from the users of the balconies towards these areas. From the table, it was evident that most of the respondents in Site A and Site B felt safe if they happened to be alone in the resting area. Its strategic location made the residents find this space a safe gathering place. All the respondents (100%) from Site A and Site B also agreed with the efficiency of the patrolling system by the security personnel in the resting area. Despite the efficient patrolling system at Site A and their fully functional mechanical surveillance of lighting and CCTV, 24% of the residents still considered the walkway area, parking area, resting area and playground unsafe at night. This was due to the unsuitable location of some of these spaces (i.e. playground) which were secluded and isolated from the main walkway route (thus limiting the natural surveillance towards the areas).

The controlled access system did provide the security needed by the parents. All parents from both sites were satisfied with the controlled access system. 85% of the parents agreed that the system was effective in controlling the volume of vehicles and people coming into the gated community. The strict procedures for checking visitors entering the site increased the sense of security for the parents where they felt safe to use the outdoor spaces alone. However, this arrangement contradicted with their response in their children’s independent use of the outdoor space as reflected from the interview. Despite agreeing on the effectiveness of the controlled access system, 80% of parents from Site A and 70% of parents of Site B did not allow their children to use the outdoor spaces all alone or with their peers unless being accompanied by the adults. Thus, the controlled access system was effective only in increasing the sense of security of the outdoor spaces for the adults but not for their children.

The controlled access was also effective in making the internal streets safer for the parents as it controlled the volume of vehicles in the area, hence through observation enabled many of the residents at Site B to use the vehicle route as their jogging track. However, a majority of the parents interviewed from both sites still did not consider it safe for their children to use the vehicle route as their outdoor activity place. This was because the controlled access was effective only in controlling the volume but not the speed of the vehicle where cars tended to speed up (more than 30m/h) on the vehicular route. The controlled access system was also effective in controlling the presence of unwanted strangers/non-residents into the gated community. Even with the strict regulation being applied to the visitors, the parents were still concerned about the presence of unfamiliar faces causing a threat to the security of the sites.

The barriers which defined the boundaries of the gated community were effective in controlling access by outsiders or non-residents or even stray animals (e.g. cats and dogs) from entering the gated community. Most of the parents interviewed agreed that they felt safe whenever they were inside the gated community because of the tall
(more than 5ft high) concrete fences that blocked the outsiders’ view into the sites. Parents from Site A (80%) and parents from Site B (80%) agreed that the fences made they felt much safer in letting their children wandered around the outdoor spaces because the fences limited the movement of the children within the boundary itself. However, the parents still did not trust their children to use the outdoor spaces alone, unless being accompanied by their peers or adults. The interviewed parents from both sites did not allow their children to use the parking area, internal streets, swimming pool, seating area and playground all by themselves as they were public places. Despite the fences the parents still had doubts about the safety of their children in these public spaces due to the possibilities of strangers managing to enter the site and be at these public spaces.

From the interview, it was confirmed that the organised surveillance was effective in providing safe environment at the outdoor spaces for the adults / parents with the constant patrolling by the security personnel within the gated community. Therefore they felt safe to use their communal spaces in their gated community; the swimming pool area, parking area, the internal streets, playgrounds and seating areas. However, the parents still did not put absolute trust in the security personnel themselves. This was because of the constant changing of the personnel and that parents felt that some of them were too aged for the position and did not fit to assume the responsibility of keeping a safe environment in their sites. Thus, from the unstructured observation, it was confirmed that there not many children used the outdoor spaces alone or with their peers, unless being escorted by at least an adult. The excerpts from the interview demonstrated this lack of trust of the guards.

“I like the fact that the security guards do the patrolling regularly inside the gated area. It makes me feel secure and the safety has been taken care of. However, it is not an excuse for me to let my child wander alone in this gated area. I just don’t trust other people whom I do not know much”

(Parent of 7 year-old boy at Site B)

“Yes, the guard has done their job well by patrolling this area 24/7. But still deep down inside me I still feel it is not safe to depend 100% your child’s safety on the guards. I can’t trust others to ensure my child’s safety....”

(Parent of 11 year-old girl at Site A)

Mechanical surveillance (lighting and CCTV) did give some sort of sense of security for the parents as this gave them the sense of comfort by knowing that the outsiders might be aware of the existence of CCTV around the territory; therefore preventing them from committing any crimes. Since the benefits of lighting were only felt during night time, it didn’t have much effect on the parents’ allowing their children to use the outdoor spaces at night. Some of the outdoor spaces were equipped with closed-circuit television (CCTV) cameras (e.g. at the gate entrance, fences and parking area) which would warn potential offenders that their activities would be observed and recorded hence refraining them from committing any crimes. However, the existence of the CCTV still did not influence the parents’ perception of safety in the outdoor spaces for their children as they still required natural surveillance due to the layout of the sites.

The Design and Layout of residential blocks created an enclosure to the outdoor spaces (swimming pool area, seating area, playground and walkways) with many hiding places, blind spots and easy escape routes. 60% of parents of Site B did allow to their children to use the street level parking area, either alone or with their peers in the street level parking area. This was due to the layout of the blocks in Site B and the wide gap between the blocks where the street level parking area and the fences (boundary) provided enough range of natural surveillance to be done from the balconies and windows. This was also supported by the results from the unstructured observation that the street level parking area was actively being used by the residents to park their vehicles. Therefore, the parents felt safe to give only minimal supervision to their children when they were in those spaces.

At Site A, the layout of the block was seen as a disadvantage in relation to the street level parking area when compared to that as Site B. Despite the small distance between the blocks, with vehicle streets, the parking area and the trees integrated with it, the dense foliage of the trees itself was blocking the natural surveillance from the upper balconies towards this area when compared to the street level parking at Site B where parents gave positive responses in allowing their children to use the space. Therefore, all the parents from Site A did not allow their children to use the street level parking area due to the layout of the residential blocks that hindered natural
The Design of outdoor spaces also affected the parents’ perception of safety. For example, the underground parking received negative feedbacks from the parents as a safe place for their children to be around, either alone or with peers. All parents interviewed from both case studies agreed that they did not allow their children to use the underground parking area alone. They all agreed that this was due to the nature of the underground area which did not receive enough natural lighting and the natural surveillance can easily be obsolete with the presence of the columns. As children were attracted to any water bodies (in this case the swimming pool), parents had to be extra careful in fulfilling the children’s desire to play with this water body on their own. In the interview, the parents claimed that when it came to their children’ independent use of the swimming pool, the huge volume of water and the depth of the swimming pool created fear for them of their children’s safety. Therefore it was not an unusual sight to see many of the children using the swimming pool being escorted by the adults. Despite the small size of the playground at Site A, the location of it which was isolated away from the normal walkway route had created negative perceptions from the parents. Therefore, most of the children here were escorted by adults whenever they wanted to use the facility. Even though the organised surveillance from the security guards at the playground was quite effective, parents were more concerned on the quality of natural surveillance towards this area.

The Sense of community was not present at both sites and therefore parents did not have the assurance that they could rely on others to monitor their children, either their child’s peers or other grownups, in this case, their neighbours’. Thus, the lack of sense of community amongst the parents had worsened the children’s use of the outdoor spaces. Parents with high sense of community did feel safe to let their children use the shared outdoor spaces compared to parents with less of a sense of community. Parents who had a close relationship with their neighbours (whose children were their children’s peers) did feel more confident to let their children use the outdoor spaces without the parents’ close supervision. Strong sense of community among the residents could increase the sense of belonging to the community and the place itself. Since most of the parents here were living far from their relatives, therefore, the strong sense of community among the residents was important to them.

5. Conclusion

The gated community becomes a sought after type of residential areas due to the problems of increasing crime rates in the urban areas such as robberies and theft in residential areas. The sense of territoriality provided by the gated community and a system that physically and psychologically controls access to the residential areas provides the residents an alternative towards safer housing environment compared to the more conventional terraced housing. However, the research conducted at the condominium sites in Sri Petaling has demonstrated that although parents tend to feel safer in this type of residential areas, the level of safety provided is not high enough to influence the parents’ perception in allowing their children to use the outdoor spaces on their own. There is still doubt on the efficiency of the management to control access which means that the gates and fences are still not effective in preventing unwanted visitors as crimes still happen in gated community. It is a shame that children cannot manipulate the internal streets as their play area. It is known that playing in the streets does provide several benefits for the children. Despite being an extended play area, vehicle route inside the gated community can become an area where children can practice to master “the crossing of the street” because of the controlled volume of incoming vehicles.

It was observed that parents still depended on natural surveillance from other residents to monitor their children due to the layout and block design. The lack of a strong sense of community also did not ease the fear of crime as parents could not rely on others to monitor their children in the outdoor spaces. The problem of frequently escorting children to go anywhere would restrict the children’s confidence. Frequent escorting by adults also might interrupt healthy development of the children – on physical, cognitive, social and emotional aspects. Parents tend to control their child’s behaviour if from their perception the actions might injure their child (e.g jumping whereas in terms of physical development, this kind activity is important to strengthen their muscles and at the same time the cognitive development of the child). The escorting also might interrupt the social development of the child among their peers. The child might not develop the skill of how to build a healthy relationship with their peer which is an important skill for them to use in the future.

In conclusion, it is observed that although the gated community succeeds in raising the perception of safety among parents, it is still considered a failure in providing an environment that allows the parents’ perception of a safe environment for their children to use the outdoor spaces without supervision. There is a concern that the urban
children will be brought up in an indoor environments in a much longer period than being exposed to outdoor environment. This has ramifications in terms of the children’s development and may affect them as individuals when they grow up. More guidelines are needed to design for a safer gated community for urban residents.

Acknowledgements

The authors would like to acknowledge the Research Management Centre, Universiti Teknologi Malaysia (Vote 06J87) and the Ministry of Higher Education (MyBrain15, MyPhd program) for facilitating the management of this research.

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