People’s Perception Towards the Contribution of Community Malls to Local Environment and Quality of Life – A Case Study on Three Community Malls in Bangkok

Suwimolwaree Rattanakrittanon, Jochen Amrehn and William Ross

King Mongkut Institute of Technology (KMITL) Ladkrabang
Correspondence: pakkawadee@gmail.com

Abstract

‘Community mall’ is a new type of shopping mall that has spread throughout the urban areas of Bangkok. The characteristics include various facilities and services such as supermarkets, drug stores, restaurants, retail stores, learning centers and banks under an open-air style arcade.

This study investigated people’s perception of community malls’ contribution towards the improvement of local environment and quality of life at three different locations. Questionnaires were distributed to 90 respondents to investigate their personal perception. The study found that over 50% of respondents indicated improvements in their travel behavior such as reduced distance travelled; time spent driving and fuel consumption. In addition, the appealing designs of the physical environment were highly appreciated. From the study, it can be concluded that in the perception of the people, the quality of life and the local environment have improved by the establishment of community malls.

Keywords: Community Malls, Quality of Life, Local Environment, Bangkok, Thailand, Case Study
Introduction

Bangkok is the largest city in Thailand with a registered population of 8.2 million residents (Adams, 2013). The total population is estimated to be approximately 14 million residents, which includes migrating workers that reside in the city temporarily (Ministry of Information and Communication Thailand, 2013). Bangkok covers an area of 1,500 square kilometers (Thavisin, 2006). It consists of the Central Business District (CBD), the middle city and a sprawl that expands into outer areas. The CBD is characterized by high-rise residential and office buildings with reasonable access to mass transit, large shopping centers and high traffic volume. The middle city surrounding the CBD stretches out about 20 square kilometers as a diverse area with mixed land uses of housing developments, individual high-rise buildings and businesses. Access to mass transit is very limited and traffic volume is lower than in the CBD, with individual congested areas. Finally, the outer city area has a low population density, low-rise buildings, shop houses and small business / industrial areas. There is almost no access to mass transit and traffic volume is moderate, but lower than in the middle city. Since Bangkok is widely spread out and without an efficient rail network, cars are the major means of transportation (Newman and Kensworthy, 1999). With a road to surface ratio of only 5% (compared to New York: ratio 38%), traffic jams have become a major problem (Bangkok Metropolitan Administration, 2010).

Since the beginning of the 70’s, people’s shopping behavior in Bangkok has shifted from local fresh markets to modern large air-conditioned department stores (Wongsapak, 1984). These department stores can mostly be found in the CBD and middle city areas. Consequently, traffic congestion has become a severe problem in those parts of Bangkok, especially, for people travelling from outer areas to the department stores. This issue has a negative impact on people’s quality of life in terms of commuting and consuming valuable time. Moreover, the higher fuel consumption and the resulting air pollution damage the overall environmental situations in Bangkok.

In order to reduce these negative effects, a new type of shopping malls called ‘community malls’ has been popping up all over Bangkok. As of 2012, Bangkok had approximately 50 community malls and developers have estimated the number to double in the next 10 years (Rungfapaisarn, 2011). The aim of the community malls is to accommodate the surrounding communities. They are characterized by open-air style arcades, providing adequate facilities and services such as supermarkets, drug stores, restaurants, retail stores, learning centers and banks (Amranand, 2012). Furthermore, they are characterized by green recreation areas. On average community malls in Thailand provide over 60 - 100 rental spaces for the various services.

Besides, from providing a pleasant shopping experience, community malls can improve the local environment as well as the quality of life of the neighborhood (Environment, Heritage and Local Government, 2009). Factors for such improvement are e.g., increased pedestrian areas, space for recreation, improvement of road safety, transport and travelling behavior.

This study investigated the perception of the visitors of three community malls on the malls’ contribution to the local environment and quality of life in their respective area.

1 Methodology

Given the three different areas in Bangkok, for the research purpose of this paper, one representative community mall was selected for each area. A questionnaire was used to investigate the perception of the respondents. This method has the advantage of direct contacts with the respondents, which allows for the collection of valuable information.

A total of 90 questionnaires (appendix 1) were divided equally between the three community malls studied. To ensure random sampling, a questionnaire was presented to every tenth person that walked past the researcher.

Fifteen questionnaires were distributed on a weekday and 15 questionnaires on a weekend. The questionnaires were distributed in two sessions, a morning session (11 am to 4 pm) and an evening session (from 6 pm to 8 pm).
By this way, it was hoped that various groups of respondents can be contacted.

The methodological approach selected for the research is known as purposive sampling, also known as non-probability sampling (Tongo, 2007). The main characteristic consists in the fact that the researcher targets a particular subset of respondents, cases, events, settings, contexts, and places for the investigation. In that way, selected respondents are considered to be normal and typical. The term ‘typical’ does not refer to the representation of sample in the sense of probability sampling (comparable to the general population). Instead, it relates its findings to research from other studies in similar situation, using the same method. Consequently, by targeting a specific group, it is sufficient to distribute only a small number of questionnaires.

The questionnaire dealt with frequencies of visits to community malls, purposes of visits, modes of transport used, environmental and physical characteristics and travelling behavior. Furthermore, in order to gain valuable information, quantitative and qualitative data were collected via interviews with managers and staffs of the three community malls.

The answers of respondents were documented and graphically illustrated in charts and tables. Information gathered from the management were not analyzed in detail, but, rather used as supporting data for recommendation for future development of community malls.

2 Results and Discussion

Figure 2.1 illustrates the locations of the three community malls. “K Village” (marked as 1) is located in the CBD, “The Nine” (2) is located in the middle city and “The Paseo” (3) is located in the outer city. Figure 2.1 presents the visual image of each community malls.
“The Nine” attracts 10,000 – 15,000 visitors on weekdays, and up to 20,000 on weekends (Rungfapaisarn, 2011). Interviews with the community malls’ managers and staff (Nandabhiwat and Wontakasuwon, 2012) revealed that the number of cars parked per day ranges between 1,700 and 2,250 at “K Village”, 3,000 - 4,000 cars at “The Nine” and approximately 3,000 cars at “The Paseo. The large number of cars parked at the community malls outside the CBD demonstrates that these malls have drawn traffic away from the CBD.

2.1 Frequency of visit to community malls

Table 2.1.1 shows the respondent’s frequency of the visit at each mall. The three malls show distinct different patterns of visits. For better analysis the data were divided into 3 groups: ‘frequent visits’ (at least one visit per week), ‘occasional visits’ (less than one visit per week) and ‘first time’ visitors.

<table>
<thead>
<tr>
<th>Frequency of Visit</th>
<th>K Village</th>
<th>The Nine</th>
<th>The Paseo</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyday</td>
<td>20%</td>
<td>23%</td>
<td>23%</td>
<td>22%</td>
</tr>
<tr>
<td>More than 3 times a week</td>
<td>3%</td>
<td>13%</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>Twice a week</td>
<td>17%</td>
<td>20%</td>
<td>40%</td>
<td>26%</td>
</tr>
<tr>
<td>Once a week</td>
<td>10%</td>
<td>24%</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>Once a month</td>
<td>27%</td>
<td>20%</td>
<td>7%</td>
<td>18%</td>
</tr>
<tr>
<td>Rarely</td>
<td>3%</td>
<td>0%</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td>First time</td>
<td>20%</td>
<td>0%</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The largest numbers of ‘frequent visits’ were found at “The Nine” with 80%, followed by “The Paseo” with 70% and “K Village” with 50%. These numbers reflect the large variety of department stores near “K Village” and the lack of alternative malls at “The Nine” and “The Paseo”. Nevertheless, the results clearly show that the majority of respondents are regular visitors to their respective malls, especially to malls outside the CBD.

At “K Village”, 20% of the respondents visited the mall for the ‘first time’. Respondents explained that they enjoy the large variety of different malls and department stores in the CBD and therefore, change their location frequently. “The Nine” is located in front of a large residential area and a major road. There are no walk-in customers and no respondent visited the mall for the first time. Hence, most respondents are local and regular visitors to the mall. “The Paseo” is also close to housing developments and an international airport. Here, 13% of respondents were visiting the mall for the first time. The study found that this group mostly consisted of tourists staying in nearby hotels.

2.2 Purpose of visit

Table 2.2.1 presents the results about the purposes of visits. The purposes were selected in order to find out if the community malls fulfill other functions beyond the use of facilities (shopping etc.) and, in that way, to investigate the relationship of respondents with their community malls. The results clearly show that this was the case and that this new type of malls was perceived as more than retail spaces for shopping.

<table>
<thead>
<tr>
<th>Purpose of visit</th>
<th>K Village</th>
<th>The Nine</th>
<th>The Paseo</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>To use facilities and services</td>
<td>23%</td>
<td>34%</td>
<td>50%</td>
<td>35%</td>
</tr>
<tr>
<td>Work related</td>
<td>30%</td>
<td>13%</td>
<td>7%</td>
<td>17%</td>
</tr>
<tr>
<td>To meet friends</td>
<td>20%</td>
<td>30%</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>To relax with family</td>
<td>27%</td>
<td>23%</td>
<td>30%</td>
<td>27%</td>
</tr>
<tr>
<td>Other reasons</td>
<td>0%</td>
<td>0%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

As shown, on average, 35% of the respondents pay visits ‘to use facilities and services’ (see Introduction). “The Paseo” had the highest score with 50% since it is the only place in its respective area that provides a variety of services in one location. Whereas for the other two malls, there are other nearby malls providing similar services. This explains their lower score. It is interesting to note that respondents visit the malls for work purposes, especially in “K Village”. A possible explanation is its location in the CBD, where visitors use it for meeting with clients.
“The Nine” scored the highest number of respondents coming ‘to meet friends’. By analogy, this can be explained by the fact that this mall is located within residential areas (large housing developments as well as standalone houses). In addition, a popular brew-house inside the mall attracts large crowds in the evening and on weekends.

On average, 27% of respondents were found to visit the malls ‘to relax with family’. “The Paseo” had 30% of its respondents in this category. Since, as this community mall is also located within residential areas, parents bring their children for entertainment and learning, while they run errands.

### 2.3 Mode of transport to the mall (on this current visit)

Table 2.3.1 illustrates the respondents’ modes of travel to the community malls on this occasion. In this study, public transport consists of local and public buses, railway services, mass transit systems (Sky Train, subway and Airport Rail Link), as well as river taxi, motorcycle-taxis and taxis.

<table>
<thead>
<tr>
<th>Mode of Transport</th>
<th>K Village</th>
<th>The Nine</th>
<th>The Paseo</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Vehicle</td>
<td>64%</td>
<td>70%</td>
<td>77%</td>
<td>70%</td>
</tr>
<tr>
<td>Public Transport</td>
<td>13%</td>
<td>10%</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>10%</td>
<td>3%</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Walking</td>
<td>13%</td>
<td>17%</td>
<td>10%</td>
<td>13%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The study shows that more than 60% of the respondents rely on ‘private vehicle’ to travel to each mall. This can be related to the high level of parking spaces provided at each mall (more than 400), making it highly convenient for the visitors to use their car.

The differences among the scores for ‘private vehicle’ can be explained by the availability of public transport. Hence, “The Paseo” had the highest score of 77% as it has the lowest access to mass transit compared to the CBD and the middle city. The outcomes for ‘public transport’ seem to confirm this explanation.

The average score for ‘walking’ was 13%. The highest score at “The Nine” of 17% is probably due to the fact this mall is situated in close proximity to community and “walking” is a convenient option of access. According to the respondents, walking to the other two malls is not convenient, because of the unpleasant street environment, tropical climate (hot and humid) and high air pollution.

The lowest scores were given to travelling by bicycle. This can be attributed to travelling distances and the inadequate bicycle infrastructure in Bangkok, which makes travelling by bicycle inconvenient and dangerous.

### 2.4 Convenience of travelling to the malls without private vehicle

Each respondent was asked to evaluate the options travelling to her or his mall other than by private vehicle. Respondents were given three categories labeled ‘convenient’, ‘reasonable’ and ‘difficult’.

Figure 2.4.1 presents the results for “K Village” in the CBD. In all, 60% of the respondents perceived the use of public transport as ‘convenient’ (40%) or ‘reasonable’ (20%). The answers the findings in table 3 show the highest number of respondents travelling to this mall by ‘public transport’ (13%).

With respect to the other two options, the majority of respondents evaluated them as “difficult”. Obviously, the respondents considered the roads to their community mall as badly designed (too small) and felt unsafe riding a bicycle. In addition, the respondents noticed that mass transit stations are not within walking
distance to the mall (even for malls located in the CBD) and the conditions of the pavements are poor.

Figure 2.4.2: Travelling without private vehicle – “The Nine”

Figure 2.4.2 shows the results for “The Nine” in the middle city. For this mall, ‘public transport’ receives an overwhelming score as ‘convenient’, despite the lack of direct access to mass transit. However, due to its location in front of a residential area, it is regularly served by local buses. It is also situated close to a main road, which is easily accessible by taxis.

In line with the appreciation of public transport, respondents gave better scores to ‘bicycle’ (63%) and ‘walking’ (47%), as compared to “K Village”, (43% and 16% respectively). From observation, travelling by bicycle and walking is more convenient at “The Nine” than at “K Village”. A direct entrance connecting the residential area to the mall has been provided to accommodate local visitors.

Figure 2.4.3 shows the results for “The Paseo”. Similar to “The Nine”, ‘public transport’ is considered as ‘convenient’ (33%) or ‘reasonable’ (37%). This is probably explained by its location close to a main road with easy access for local buses and taxis. Travelling by bicycle was found to be ‘difficult’ by 66% of the respondents. The main reason is obviously the high traffic and the lack of bicycle lanes. 70% of the respondents found ‘walking’ to be ‘difficult’, commenting that the roads surrounding the mall are polluted with car exhaust fumes, making it unpleasant to walk.

For all the malls, results show, at least in the present situation, that ‘public transport’ is perceived as an attractive option which, probably, may be improved. “The Nine” for instance has already recently implemented a free shuttle bus service to transport customers to and from Huamark Airport Link station. This free transport links people to mass transit systems as well as draw people to stop at “The Nine” on the way to their destinations.

2.5 Environmental and physical characteristics

The respondents were asked for their perceptions on six categories concerning the environmental and physical characteristics. They were given the options ‘improved’, ‘no change’ or ‘worse’. The areas considered were ‘trees and green spaces’, ‘places to sit and relax’, ‘condition of sidewalks’, ‘bicycle infrastructures’, ‘road safety’ and ‘air quality’.

Figure 2.5.1: K Village environmental characteristics
Figure 2.5.1 illustrates the results for “K Village”. The majority of respondents (67%) noticed that the number of ‘trees and green spaces’ as well as the ‘places to sit and relax’ have ‘improved’. According to the manager, green concepts were an integral part of the “K Village” design. For this reason, substantial funds were allocated for landscaping. The high score of positive responses shows that this approach is appreciated by the customers.

67% of the respondents considered the ‘conditions of sidewalks’ to have improved, probably also because of the convenient stair-free access to the inner part of the mall. If comparing with the 84% score classifying ‘walking’ as ‘difficult’ (See figure 3), one should bear in mind only the sidewalks in the direct vicinity of the mall have been modified. For similar reasons, only 27% of the respondents evaluated ‘Bicycle Infrastructure’ as ‘improved’, since there are still no bicycle lanes, but bicycle parking space is available inside the mall.

With respect to ‘road safety’ only 20% indicated an improvement and 10% indicated ‘worse’ because the mall has attracted additional traffic to this area.

In the category ‘air quality’, the scores were similar to “K Village”. 27% of respondents indicated that ‘air quality’ has ‘improved’, while 23% regarded it as ‘worse’ than before. The reasons given for these answer were similar to “K Village”.

Compared to the other two malls, only 43% of respondents saw the ‘trees and green spaces’ as ‘improved’. The reason could be that “The Nine” replaced a previous smaller community mall that was located on the same site earlier. This former mall also provided green areas but had limited outdoor sitting possibilities. Consequently, 83% of the respondents appreciate improved ‘places to sit and relax’ at “The Nine”.

Similar to “K Village”, sidewalks have been improved only in front of the mall and no bicycle lanes have been built. As a consequence, only a minority i.e., 40% and 17% considered these factors as ‘improved’.

Although the traffic in front of the mall has increased significantly since the opening, respondents considered ‘road safety’ as either ‘improved’ (40%) or not changed (60%). One local resident mentioned that, since the establishment of “The Nine”, there have been fewer accidents on that road. The reason may be that a dangerous intersection in front of the mall has been closed for traffic. In addition, respondents mentioned that “The Nine” provides well trained traffic guards to direct the traffic.

20% of respondents perceived air quality to have ‘improved’ since the establishment of the mall. One of the reasons may be the addition of trees and green areas in the neighborhood. Even so, 27% considered air quality to have become ‘worse’ due to the increased traffic in Bangkok.

The answers for “The Nine” show that, with the exception of air quality, respondents do not recognize any negative effects of the mall on the local environmental (Figure 2.5.2).
Before “K Village” and “The Nine” were established, the respective areas were already developed with buildings and shopping facilities. On the other hand, “The Paseo” was literally built at an undeveloped roadside with dry and dusty environment. Despite these differences, the scores (Figure 2.5.3) for “The Paseo” regarding ‘trees and green spaces’ and ‘places to sit and relax’ were similar to “K Village”, with the majority indicating improvement (70% and 67% respectively). These positive scores show the appreciation of improvement made to the landscape.

The respondents appreciated the places to sit and relax as well as condition of sidewalks, with 67% indicating ‘improved’ and only 33% ‘no change’.

43% of the respondents considered the infrastructures for bicycles to have ‘improved’. However, this information contradicts qualitative data gathered from the management, that neither bicycle parking space or bicycle lane have been established since opening of the mall.

Road safety is considered as ‘improved’ by 43% of the respondents. “The Paseo” management arranged with the district office to install a pedestrian crossing directly in front of the community mall. The crossing provides convenience for pedestrians as well as giving indication for drivers to slow down as they reach the area.

In the area of ‘air quality’, the study found similar results with the prior two community malls. ‘Air quality’ was specified as ‘no change’ (43%), ‘improved’ (34%) and ‘worse’ (23%) by the respondents. The respondents explained that the roadside in their environment is generally dusty with traffic and fumes. Moreover, the “The Paseo” has become a place to escape from polluted air on the sidewalk.

Overall, the study has found that the majority of the respondents in all three community malls saw a common improvement in the following aspects, ‘tree and green spaces’, ‘places to sit and relax’, and ‘condition of sidewalks’. However, respondents mostly noticed ‘no change’ in the areas of ‘bicycle infrastructures’, especially due to the absence of bicycle lanes.

‘Road safety’ was considered to have ‘improved’, as community malls have pedestrian crossings, well trained guards to direct traffic to help reduce congestion and traffic lights. In the area of ‘air pollution’, most respondents indicated ‘no change’ or ‘worse’. Nevertheless, the answers on ‘air pollution’ have to be considered with caution as mentioned earlier.

2.6 Travelling Behavior

The purpose of this question was to investigate respondents’ opinions on their travelling behavior using four categories: ‘travel distance’, ‘time spent in car’, ‘fuel consumption’ and ‘congestion’. Again, three options were given: ‘reduced’, ‘no changed’ or ‘increased’.

Figure 2.6.1 shows the results for “K Village”. 60% of the respondents perceived that their ‘travel distance’ has been reduced. For ‘time spent in car’ and ‘fuel consumption’ 67% and 54% mentioned reduction, respectively. Almost nobody reported any worsening. However, the majority of respondents indicated that ‘congestion’ has not changed (47%) or increased (33%).
Since the new mall provides these services locally, respondents’ perceived their ‘travel distance’ (48%), ‘time spent in car’ (43%) and ‘fuel consumption’ (53%) to have been ‘reduced’. On the other hand, 7% of the respondents indicated an ‘increased’ for all three categories. This can be explained by the attractiveness and closeness of the mall that draws people to travel there more frequently.

Compared to the other two malls, “The Paseo” had a higher percentage of respondents indicating reduction on ‘congestion’ (53%). A possible explanation could be that this group of respondents did not evaluate the traffic situation in front of the mall as such, but their personal experience of less exposure to traffic congestion due to the new mall. Nevertheless, Bangkok traffic remained a major problem, with 47% indicating ‘no change’ or ‘worse’.

In summary, the study shows that community malls have contributed to alter the travelling behavior of the respondents. Many participants claimed that ‘travel distance’, ‘time spent in car’ and ‘fuel consumption’ has been ‘reduced’. However, the views on traffic ‘congestion’ are mixed and the presence of community malls is not perceived as solving this general ‘Bangkok traffic problem’.

3 Summary and Recommendations

This paper contains a report on the perception of visitors of three selected community malls regarding the malls’ contribution to the quality of life and the environment. The results show that visitors recognized the effects of community malls in improving the environmental and physical characteristics of the neighborhood. In particular, high appreciations were given to trees and green spaces, outdoor sitting and resting areas and improved conditions of the sidewalks. Respondents also reported significant changes in their travelling behavior in order to access the malls, but saw no significant improvement in respect of traffic congestion, which is a general ‘Bangkok problem’.

Hence, Bangkok communities clearly benefit from their community malls through the creation of a more livable space and environment.
3.1 Recommendations for the future development of community malls

In order to sustain and enhance the contribution of community malls to neighborhoods and the environment, specific objectives should be considered in the development process. First, the location of community malls is important in itself. Community malls should be located close to their target visitors and provide them with easy access. Second, access to the community malls should be convenient, safe and efficient with transport modes other than private cars, in particular, non-motorized modes and public transport in the neighborhood. Third, a close cooperation with local government offices is required, in order to redirect traffic flow, allocate bicycle lanes and improve sidewalks’ condition.

Considering the future expansion of community malls in Bangkok, a network of well-planned community malls will significantly benefit local communities.

Reference


