# TERRITORIAL PERMEABILITY AND PERCEPTION OF SECURITY AMONG RESIDENTS OF GATED AND NON-GATED COMMUNITIES

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Abstract: The present paper investigates the territorial permeability and perception of security among residents of gated and non-gated communities. The rapid growth of gated communities on urban landscape have made it important to explore the physical layout of these communities and its impact on resident's sense of security. Two gated and two non-gated sites were selected from Lahore, Pakistan as case studies. The physical layout of selected gated and non-gated communities was analyzed. The data for resident's sense of security was obtained from face-to-face interviews from two gated and two non-gated research sites. The permeability analysis of layout plans of four research sites revealed two themes: 1) physical permeability and 2) perceived permeability. The analysis also revealed that participants of gated communities felt more secure while living in gated environment as compared to participants of non-gated communities. It is concluded that physical layout of residential communities impacts the resident's sense of security and satisfaction.

Keywords: Security, Territoriality, Gated communities, Non-gated communities, Lahore.

#### Introduction

Territorial behaviors are one of the spatial behaviors (personal space, privacy, crowding, and territoriality). The concept of human territorially explains human's relation with their surrounding physical environment. Within the context of social sciences, the concept of human

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territoriality is divided into two major schools of thoughts. The first school of thought views it with a more deterministic lens viewing territoriality as biological need of humans to occupy and defend a territory. Roots of this school of thought came from animal studies and the idea was borrowed from biologists, psychologists, and behavioral scientists to apply on humans. Contrary to this, the second school of thought view human territoriality as a 'social strategy' of human to exert power (social and political) over a space they occupy. Scholars from human geography, political science, and sociology discipline endorse this second school of thought<sup>1</sup>.

The evolutionary deterministic definition of human territoriality has been criticized by many scholars<sup>2</sup> and territoriality as social strategy has gained more popularity over the period of time through large scale studies (state, region, or city level) conducted in areas of political science, political geography, and urban studies without giving much consideration to individual human factors<sup>3</sup>,

The social theory and geography movement (STGM) influenced by the work of Micheal Foucault<sup>4</sup> gained popularity in 1980's. This movement, following the work of Foucault, started paying attention to the social relations that occur in a space (who controls what and for which purpose). This helped scholars to investigate the power dynamics that take place in different territories and on different scales (home, neighborhood, city, state etc.)

By emphasizing social relations, territorial dynamics have been explored on different scales ranging from micro or small<sup>5</sup> (home, workspace etc.) to macro or large levels<sup>6</sup> (state, region etc.). This progress paved way for the urban scholars to study urban landscape on different scales by dividing it into different territories (public, private, and semi- private) and considering power relations, occurring in these territories, as territorial behaviors. On the other

<sup>&</sup>lt;sup>1</sup> Karrholm M, "A Conceptual Discussion of Territoriality, Materiality, and the Everyday Life of Public Space" Space and Culture, 10, no. 4 (2007): 437-453

<sup>&</sup>lt;sup>2</sup> Bonnes M and Secchiaroli G., Environmental Psychology; A Psycho-social Introduction (London: Sage publications, 1995)

<sup>&</sup>lt;sup>3</sup> Brown, G., Crossley, C. and Robinson, S.L., "Psychological ownership, territorial behavior, and being perceived as a team contributor: the critical role of trust in the work environment', *Personnel Psychology*, 67, no. 2 (2014): 463-485.

<sup>&</sup>lt;sup>4</sup> Foucault, M, Discipline and Punish: The Birth of the Prison (New York: Vintage Books, 1979)

<sup>&</sup>lt;sup>5</sup> Michney, T. M, "Race, violence, and urban territoriality - Cleveland's little Italy and the Hough uprising", Journal of Urban History, 32, no. 3 (2006): 404-442

<sup>&</sup>lt;sup>6</sup> Kintrea, K., Bannister, J., & Pickering, J, "Territoriality and disadvantage among young people: an exploratory study of six British neighbourhoods", Journal of Housing and the Built Environment, 25, no. 4 (2010): 447-465.

hand; territorial behaviors are defined as individual or small group behavior that occurs in a territory which an individual or small group occupies within the field of environmental psychology<sup>7</sup>.

Territoriality is defined as "a pattern of behavior and attitudes held by an individual and group, based on perceived, attempted, or actual ownership or control of a definable physical space, object, or idea". So territoriality leads us to mark or personalize our territory to signify our 'ownership' and to engage in a variety of behaviors to protect it from invasion9. Focusing on the diverse theoretical definitions and scales of territoriality, scholars have been pointing out the need for interdisciplinary studies in order to explore the construct human territoriality<sup>10</sup>. For purpose of this research, same definition of territoriality had been used.

### Physical environment (Gated/Non-Gated communities) and territoriality

Built environment refers to the portion of the physical environment that is attributable to human efforts. The built environment includes tools, structures, buildings and technologies of various sorts designed and built by humans to create comfort and controllability and to extend their abilities to meet goals. The built environment is produced by human behavior, and what humans built has a great effect on human behavior.

The city and its residential landscapes are not mere "bricks and mortars" but spaces encoded with multiple social-political meanings and cultural significations. Housing styles carry many aesthetic, social and economic meanings that have profound influences on the wellbeing of urban life and the community<sup>11</sup>. In particular, some researchers considered gated communities as manifesting a number of social tensions "between *exclusionary aspirations rooted in fear and protection of privilege and the values of civic responsibility;* between the trend toward privatization of public services and the ideals of the public good and general welfare; and

<sup>&</sup>lt;sup>7</sup> Brown, G., Lawrence, T.B. and Robinson, S.L, "Territoriality in organizations", *Academy of Management Review*, 30, no. 3 (2005): 577-594.

<sup>&</sup>lt;sup>8</sup> Gifford R, "Environmental Psychology and Sustainable Development: Expansion, Maturation, and Challenges", *Journal of Social Issues*, 63, no. 1 (2007): 199–212.

<sup>&</sup>lt;sup>9</sup> Hutchison, D.E, *Dimensions of Human Behavior: Person and Environment* (USA: New Sage Publications Inc: 2007)

<sup>&</sup>lt;sup>10</sup> Xu, F, "A Situated Understanding of Residents' Caretaking Attitudes toward Shared Spaces in Three High-Rise Gated Developments in Shanghai", *Ecopsychology*, 7, no. 2 (2015): 59–74

<sup>&</sup>lt;sup>11</sup> Hayden, D, "Redesigning the American Dream: The Future Of Housing, Work And Family Life" (USA: Norton Publishers, 2002)

between the need for personal and community control of the environment and the dangers of making outsiders of fellow citizens"<sup>12</sup>

For their harshest critics, gated communities have often been diagnosed as an "urban pathology" <sup>13</sup> that is associated with destructive forms of "splintering urbanism" and other detrimental social impacts including the excessive encroachment of private property on public spaces, the undermining of traditional forms of citizenship bonding and civic trust, the exacerbation of social-spatial polarization and urban inequality and, ultimately, the disintegration and eventual destruction of the society at large and meaningful public life

In the United State alone, it has been estimated that the number of people living in gated communities has increased from four million in 1995 to eight million in 1997 and to sixteen million in 1998<sup>14</sup>. However, the rise of gated enclaves is by no means an "American" phenomenon because new urban housing form can also be found in major cities of developing countries (Brazil, Indonesia, Malaysia, Turkey, South Africa, China, India, and Pakistan), and may be the result of somewhat different local context and factors. For example, gated enclaves in South Africa are inhabited not only by the rich but also by people from varied income groups and ethnic backgrounds. In Lebanon, gated communities first emerged during the civil war and gated compounds provide families with a sense of privacy and identity but also as a way to contain expatriate in Saudi Arabia ("Western") cultures in the predominantly Muslim country<sup>15</sup>, <sup>16</sup>. Fear of crime and police brutality further spurred the sprawl of gated enclaves in Latin America while suburban gated complexes in the Mediterranean coast of Western Europe (Madrid, Lisbon, and France) often serve as holiday homes for wealthy elites <sup>19</sup>.

#### Aim of the study

<sup>&</sup>lt;sup>12</sup> Blakely, E.J & Snyder, M.G, "Fortresss America: Gated Communities in the United States (Washington DC: Brookings Institution Press, 1997)

<sup>&</sup>lt;sup>13</sup> Davis, M, "City of Quartz: Excavating The Future in Los Angeles. (London; New York: Verso, 1990)

<sup>&</sup>lt;sup>14</sup> Low, S, "Behind the Gates: Life, Security and the Pursuit of Happiness in Fortress America" (London: Routledge, 2003)

<sup>&</sup>lt;sup>15</sup> Tanulku, B, "The formation and perception of safety, danger and insecurity inside gated communities: Two cases from Istanbul, Turkey" Journal of Housing and the Built Environment, 33 (2018): 151–173.

<sup>&</sup>lt;sup>16</sup> Zhang, S., & Zheng, G, "Gating or de-gating? The rise of the gated village in Beijing", Habitat International, 85 (2019): 1–13

Gated communities can be found under many different names in developing countries like housing project, city fortress, town, and housing societies etc but the common characteristics among all these are walled space with gates, barriers, and security measures. As long as Pakistan is concerned, the urban landscape of almost all big cities has been transformed. A great number of citizens have been shifted from congested to more secure and gated residential areas. This new spatial layout has divided city into two major clusters that is; gated residential areas and nongated residential areas.

During last two decades, major cities of Pakistan have failed to provide affordable housing to the people due to high migration of people into cities<sup>17</sup>. Public housing departments have failed to meet the high demand of housing. Therefore, the spur of gated communities at the outer skirt of city has become very prominent<sup>18</sup>. Lahore is the second largest city and provincial capital with rich historical and cultural background. Hence, the high demand of housing is escalating<sup>19</sup>. Lahore is one of the Pakistani cities where numerous gated communities have emerged in last three decades. The gated communities in Lahore can be defined as "a residential areas marked by walls with few access points (gate or gates) and with security measures (barriers, CCTV cameras, guards, and check-posts) which restrict public access to these areas. Contrary to this, the public housing or old residential areas are the ones that are not marked by walls neither they have organized security measures which, in turn, do no restrict public access to these areas. Only security measures are the ones that are being deployed by individual house owners. Now the question is how permeable (ability to restrict public access by providing minimum entry points) these two physical layouts (gated and non-gated) are? And how the permeability of housing unit impacts residents' sense of safety? Permeability is basically "the extent to which an environment allows people a choice of access through it, from place to

<sup>&</sup>lt;sup>17</sup> Coy, M. & Pohler, M, "Gated Communities in Latin America Mega-Cities: Case Studies in Brazil and Argentina," *Environment and Planning* 29 (2002): 355-370.

<sup>&</sup>lt;sup>18</sup> Tariq, F., Salman, M., Hasan, J., Zafar, Z., Malik, S., Gul, A, "Developing countries perspective on housing affordability: Recommendations for Pakistan", *Technical Journal, University of Engineering and Technology (UET) Taxila, Pakistan*, 23 (2018): 1–10.

<sup>&</sup>lt;sup>19</sup> Nadeem, O., Hameed, R., Zaidi, S. S., Haydar, S., Haider, H., & Tabassum, H, "Residents' perception and analysis of the contemporary neighbourhood design practices in Lahore, Pakistan", *Pakistan Journal of Engineering and Applied Sciences*, 12 (2013): 143–158.

place"<sup>20</sup>. In other words, permeability is the capacity of an environment providing single or multiple access points to people within it.

#### Method

For this study; two gated and two non-gated communities were selected after field inspection. To select the sites, non-random site sampling was used<sup>24</sup>. To select gated sites, initial permeability was identified during field inspection. The purpose of gated housing is to keep the space less permeable (offering minimal entry points to restrict public access). To select gated sites, field inspection identified two variations including 1) minimally permeability (access to community is not granted without producing documental identification like ID card etc.) 2) permeable (access sometimes granted without documental identification). For minimal permeability, EME Housing Society was selected whereas; Eden Canal Villas was chosen for permeable site. To generate comparison, two non-gated sites were selected. To include high end non-gated site, DHA was selected and Allama Iqbal Town was selected for the middle-class housing. Four sites are considered as four case studies. Semi structured interviews were conducted to explore the resident's sense of safety and perception of gated and non-gated communities.

**Site A (minimally permeable):** EME (Electrical Mechanical Engineers) society is one of the oldest and largest societies in Lahore. The society is famous for its high security. The society has nine blocks and almost 3000 households. Outsiders are required to show documental identity to enter the society. The society has nine blocks, schools, hospitals, mosques, markets, sports club and cinema. EME is one of the best gated communities offering residents maximum facilities.

<sup>&</sup>lt;sup>20</sup> Rahman, A., & Anis, B, "Dynamics of gated communities, their impact and challenges for sustainable development: A case study of Lahore, Pakistan", *International Journal of Architectural Research*, 3 (2009): 57–7



Figure 1: View of EME

Source: Pictures compiled by author (2021)

**Site B (Permeable):** Eden Canal Villas is a geographically small housing society located on Mohlanwal road. Compared to EME this society has 250-300 households. Eden builders are famous in providing the small-scale compact houses to middle class. This society has parks, mosques, and other everyday amenities but on a much smaller scale than EME.



Figure 2. Pictures of View of Eden Canal Villas

Source: Compiled by Author (To compare the data two non-gated communities were selected)

**Site C** (**Allama Iqbal Town**): Allam Iqbal town is a non-gated public housing community. It also has wide range of parks, markets, green areas, and mosques and is also surrounded by other housing developments. Unlike gated communities, it does not have boundary wall or gate.

**Site D (DHA):** Defense housing authority is a famous private housing project that offers luxurious hosing opportunities to the city's elite. It is a large-scale project and has 12 phases in Lahore. It also offers parks, markets, shopping plazas, cinemas, mosques, and other amenities but this too is non-gated and does not have boundary wall or gates. EME is the only phase of DHA that is gated and is included in the study as gated community.

#### Procedure

Permeability analysis of physical layouts of two gated research sites was conducted by indicating the boundary wall and gates (accessibility points) on map. For non-gated sites, one block from Allama Iqbal town and one block from DHA Phase V were selected. The semi structured interviews, from residents, were recorded and transcribed. The comparative themes from two data sets (gated and non-gated) were generated. Six step guidelines were followed to generate themes<sup>21</sup>.

#### **Results and Discussion**

Physical markers in gated communities are deployed to restrict easy accessibility to general public within these communities. The primary access to the communities is often minimized by deploying gates, walls, fences, and other surveillance systems, therefore, offering scrutinized access to outsiders as well as providing a sense of safety in its residents by keeping access points less permeable. Permeability is defined as the capacity of an environment providing multiple access points to people within it. The analysis identified two emerging patterns of permeability in gated home communities: physical permeability and perceived permeability.

*Physical Permeability (Gated community)* is identified through the spatial exploration of research sites. Physical permeability for two gated research sites was analyzed by identifying the actual physical access points for both sites (see figure 3 & figure.4).

Site A (EME housing society) is a geographically large community and it had seven gates or access points when it was established. Currently, besides main gate, additional gate 2 is used with restrictive entrance of EME's management to access the society. Rests of four gates have become non-functional over time by peripheral gated developments over the years. By looking on layout map of site A, it would seem a highly permeable space with seven access points, but the data revealed that only two gates are functional, and access is granted after strict scrutiny, which makes the society less physically permeable.

<sup>&</sup>lt;sup>21</sup> Bently, I., Alcock, A., Murrain, P., McGlynn, S., & Smith, G, "Responsive Environments: A Manual For Designers" (Oxford: Architectural Press, Elsevier Ltd, 1985)



Figure 3. Google map of EME society indicating two functional gates

Source: Google map

The permeability analysis of spatial layout of Site B (Eden Canal Villas) is presented in figure 4.

Shafi Kidney Clinic Ju Dr. Tahir Shafi & Dr... Eden Canal villas Society Office ايدن كينال ولاز سوسائٹی کے دفن Punjab University Employees Housing. ILAQA.com ZirCon Spices Pakistan بارک Filter House Cannal Market Eden Canal Road Lahore Villas Park Basketball Court ايڈن كينال ولاز بارک Bait-ul-Faza Rd No. 14 Jami Ahle Kousar Kitchen State Life Insurance ·39) Jaka

Figure 4: Google layout map of Eden Canal Villas and its Main gate which is used for entry and exit both

Source: Google map

Although the site B in initial site sampling phase was identified as 'permeable gated community' because of its somewhat lenient policy to grant access to the community, the physical permeability analysis of its layout plan shows that it is less physically permeable compared to site A as it has only one functional gate or one access point. The analysis revealed that permeability of physical markers not only depends on the fewer access points but also the efficient deployment of human and technological surveillance measures.

The data revealed that the phenomenon of gated home spaces offers people the opportunity to own a home in a secure spatial unit. Unlike non-gated residential areas, these home enclaves offer a territorially organized home space to its residents by putting up boundary walls, gates, barriers and human or technological surveillance system. All the residents of gated

home spaces that are interviewed for this study migrated here from different open home spaces yet not a single resident expressed the desire of going back to non-gated communities.

It was assumed, initially, that the residents from community with permeable territorial physical markers (site B) would show some inclination towards their old residence but interestingly they expressed their desire to move to a more secure or territorially active home community. In the initial field inspection for site sampling, researcher recognized two variations in regard of physical territorial markers including active and permeable. Regardless of the efficiency of physical markers (active and permeable), the mere deployment of these markers provides residents with the collective sense of safety, collective territorial control, collective identity, and sense of collective ownership.

Despite the fact that the respondents, who perceive that the permeability is common occurrence (inactiveness of territorial physical markers), also kept in view that these territorial markers can be made functional (less permeable) in time of any disruption and unrest which exactly happened during the recent pandemic of Covid-19. Though not the objective of this study, researcher was in writing process of this thesis when the entire world went into quarantine and gated communities' territorial physical markers made it quite easy for the management to turn these communities into smaller quarantine zones.

Moreover, residents living in gated communities where territorial markers are permeable (fewer restriction on entry of nonresidents), aspire to move in communities where territorial physical markers are more efficient. The results indicated that residents of active (restriction of nonresident's entry) and permeable (fluctuation of restriction) territorial markers expressed their satisfaction and associated sense of being 'at home' with their gated home community. One male resident from site A (active physical markers) expressed it as:

'Certain issues arise here too but I am satisfied with this society. This is one of the best societies I ever lived in my entire life. Security is good here no one can enter without showing identity cards, even our relatives had to show their ID cards. I think it is best for everyone. When I was living in open community, I always had one side of mind at home because there was no security outside the house' (A08).

Comparison of two research sites surfaced that the geographical size of gated home community impacts the neighborhood ties that is; community activities place attachment and sense of home and safety (see Table 1). The site B for permeable territorial physical markers was geographically small sized community and the data revealed that residents were more closely tied together as compared to residents from Site A which had active territorial markers but was geographically a large society. A female resident from site B expressed it in these words:

'I moved here from Iqbal Town and the day I came here people from society came to welcome us. Actually, this is a small society, so everybody knows one another. We gather together every week for Quran reciting, and I can recognize any stranger outside of home, as a matter of fact I investigated a man few days back who was roaming in the street and it turned out that he was a guest in one of the neighbors' (B13).

*Table 1: Functionality of physical markers and sense of home across two gated research sites.* 

	Functionality	of	Geographical	Approximate	Perceived limit of Gated
Site	Territorial	physical	size	density	community as near home
	markers				space
A	Active	territorial	Large	2500-3000	Residential block as near
	physical markers			household	home space
В	Permeable	territorial	Small	250-300	Unified sense: whole
	physical markers			households	society as near home
					space

Also, it was observed in the field inspection and interactive participant observation of site B that with open front doors of houses, children were playing in the streets and playground freely. It usually happens in a tight knit community where people are familiar and acquainted on personal grounds with one another. Moreover, it could be analyzed that the perceived sense of near home territory was not only based on the functionality of territorial physical markers but also on the geographical size of gated community. Site A, despite having active territorial physical markers was unable to provide the unified sense of collective home to its residents because of its large geographical size. One male interviewee said:

"Well, I don't really feel that I am home when I cross the gate my society but yes when I see the java restaurant sign near my block then I feel like I am almost home" (A21).

On the other hand, site B with permeable territorial physical markers is a significantly small society. In this site, results revealed that residents projected a unified sense of collective home to their gated community. Geographically small community allows its residents to view the community as one collective home while being more familiar and helpful to each other. One male resident said:

"This is a small society. We all know one another by face. I go outside and I can tell you which person is resident here and which is stranger even guards know everyone by face... yes the moment I saw the sign of our society outside I feel like I am home because it's a small community you can visit the whole community in ten minutes" (B04).

Physical permeability (Non-gated communities): To compare the physical permeability of gated sites with non-gated sites, the layout maps of each non-gated site were obtained from internet source. Both non-gated sites are geographically large as DHA Lahore has twelve phases and Allama Iqbal Town has twenty-six blocks. To obtain a comparative picture of physical permeability from non-gated research sites, one block from each non-gated site was randomly picked (see full maps in appendix 1). Layout map for each block was edited and major permeability points were identified and marked (see figure 5 and 6).

COLLEGE STROOM COLLEG

Figure 5. Permeability points on layout map of Ravi block, Allama Iqal Town

Source: Arranged by Authors

Figure 6. Permeability points on layout map of DHA Phase V, Block A



The comparative permeability analysis of non-gated research sites indicated that one block of Allama Iqbal town has eighteen permeability points and one block of DHA Phase V has fifteen permeability points. It was significantly surfaced that physical permeability of gated communities is far less than the physical permeability of non-gated communities. Hence, gated communities by offering physical markers (walls, gates, surveillance) turn the physical space into 'less physically permeable environment' which reduces unwanted public access and make the space exclusive to its residents.

Perceived permeability (Gated communities) was identified by the resident's perception of the permeability of these Physical markers. Residents were asked about the potential access their gated community offers to outsiders. The analysis revealed the perceived permeability of these physical markers on three levels (see Table 2).

Table 2: Number of respondents on each perceived permeability level across two gated research sites.

Perceived permeability	Site A	Site B
No chance of permeability	13	07
Permeability as common occurrence	01	03
Permeability as rare occurrence	11	07

Source: Compiled by authors

The residents with 'perceived no permeability' have the perception that physical markers are not permeable and are efficient enough to keep the outsiders from getting open access to the gated community while residents with 'permeability as common occurrence' perceive that the physical markers are permeable and can be accessed by the outsiders without much difficulty.

The residents with 'permeability as rare occurrence' tend to believe that physical markers are not permeable but the possibility of occasional breach does exist. The permeability analysis of physical markers revealed that majority of respondents from gated communities believe that physical markers are less permeable and very few (four respondents) tend to believe that physical markers can be breached easily by outsiders or intruders.

Regarding perceived permeability (Non-gated communities), the analysis revealed that the residents from non-gated communities are aware of the high permeability of their residential environment. Allama Iqbal Town is a densely populated non-gated residential area and to make

space less permeable, it is a common practice here to install gates on both ends of street whereas; such self-help measures to make a street less permeable are not much effective. All the residents interviewed from Allama Iqbal Town expressed their dissatisfaction over these security measures as one resident said:

"There are gates on both ends of the street, and you know we even hired a watchman, but we still cannot be sure as who is entering the street. I don't trust the watchman and I have noticed that he lets everyone in and most of the time he is sleeping in his chair. I keep my home gate close at all times and don't allow children to play in street. This is just to satisfy the heart that oh! The gate and watchman are there for security, but in reality that's not the case". (C 02)

The trend of installing gate is common in Allama Iqbal Town but the phenomenon does not exist in DHA. The reason is strict architectural rules by DHA (Defense Housing Authority). Residents are not allowed to make any spatial alterations without getting permission from DHA. DHA despite being non-gated residential area is a home for elite class who can afford personal security, yet it cannot be generalized among all phases of DHA as one resident explained it as:

"I am a native of DHA. I live in phase 1 which is the oldest phase of DHA. The people living in phase 1 and 2 are not from elite class. Majority of us are upper middle-class people and unlike residents of newly developed phases of DHA who usually are rich businessman, we cannot afford personal security therefore people from new phases might give you a different opinion but I do believe that gated communities are more secure and organized."

#### Another resident said:

"I am living here since last 26 years and if there is any robbery, we have to go to police station like people who live in other open residential areas (mohalla system), we cannot go to DHA management because they will again direct you to relevant police station so what's the point of going to this management. If you read newspaper the crime rate in DHA is very high. Every day there is a news and that's not the case in gated communities, at least not in good gated communities like EME etc."

The analysis revealed that participants from both non-gated sites believe that a well-managed gated residential environment is better than the non-gated one. Interestingly, the

findings show that majority of participants interviewed from non-gated sites expressed their desire to move to a more managed gated residential area. Almost all the participants interviewed from site C (Allama Iqbal Town) expressed their intention to move to some gated community in future.

On the other hand, the residents interviewed from Site D (DHA) expressed mixed reactions to the inquiry of potential mobility to gated community. Four respondents despite acknowledging the fact that gated residential environment is more secure and organized, did not show the intention of moving to any gated community in future (see table 1.2). They rather believed that this is DHA management's responsibility to provide security to its residents. All the residents interviewed from non-gated sites expressed their dissatisfaction over the high permeability of their residential area.

Table 3: number of respondents in favor and against of mobility to gated residential area across two non-gated research sites.

Non-Gated Sites	Desire to move to gated	Dissatisfied but reluctant to
	residential area	move
C (Allama Iqbal town)	06	01
D (DHA)	04	02

Source: Compiled by authors

#### Conclusion

The very evident difference in spatial organization of gated and non-gated communities is the permeability of residential space. Gated communities are territorial entities, by putting up boundary wall, gates, and security measures the space becomes less permeable. Contrary to this, the spatial organization of non-gated communities is highly permeable (multiple access points). The results revealed that the actual and perceived permeability of space impacts resident's perception of security. It is evident from the findings of gated research sites that participants' perception of permeability of their residential unit impacts their perception of security, which in turn lead to different territorial behaviors. Participants from gated sites, with perceived high permeability tend to withdraw from spatial resources (not using community's parks etc.) more than participants with perceived low permeability who exhibit 'engaging behavior' (utilizing spatial resources within gated community). On the other hand, it is evident from the findings of

non-gated communities that residents of non-gated sites while living in highly permeable residential unit tend to respond with 'withdrawal behavior' (disengaging from spatial resources). Furthermore, It is evident from the above analysis that participants from both sides (gated and non-gated) acknowledge the fact that gated communities offer safer home space than non-gated communities. Furthermore, the analysis revealed that geographical size of gated community also impacts the resident's sense of safety, as it is evident from present analysis that large scale communities (like EME) require more structuralized security system to inculcate the perception of safety in its residents. The analysis also revealed that the residents of gated communities tend to view their gated community as an extension of home (project homely feelings to community setting). This phenomenon was nonexistent in the participants of non-gated communities.

## Appendix



The figure is showing the layout map of DHA Phase V with indicated block A that was selected for permeability analysis. Source: Lahore real estate .com (2021).



The figure is showing the layout map of Allama Iqbal Town with indicated Ravi block that was selected for permeability analysis. Source: Lahore real estate .com (2021).