

Sense of Security in Large Scale Redevelopment Projects: A Case Study From Amman, Jordan

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Abstract

Sense of security is a very important issue in urban design and planning, especially in a large redevelopment project such as the Abdali Project. Our case study in this research is taken from Amman City, the capital of Jordan, where a large area of land of about 350'000 square meters were redeveloped and completed its first phase in 2016. The total developed built up area is around two million square meters which will be built on three phases, and the project cost exceeded US\$ two billion. Many architects and planners see the Abdali Project as model of globalization, where its architecture and style are universal and far away from local and cultural values. Feeling secure in large scale projects is a major factor in urban design as many authors mentioned. It is almost the most significant requirement of all societies. The perception of the environment in a selected area may differ from one person to another according to each one experience and background. Fear of crime affects greatly the mental behavior of the individuals, and this cause people to avoid places and projects with potentials offenders. This study examines the degree of fear at this project and the sense of security through a questionnaire for users of the project. The Abdali Project consists of three main sectors, the Abdali Mall, the residential apartments and the office and retail buildings. A long pedestrian Boulevard penetrates the whole project with a total length of 330 meters. At end a number of conclusions are reached emphasizing the importance of the main four factors of the gender, the age, the previous victimization experiences and the presence of some physical and social signs at the examined area. Such signs are rubbish, graffiti, abandoned cars or buildings, poor lighting and narrow alleys. The other signs are social such as public drinking, begging, youth skipping school, homeless sleeping in the area and others.

Keywords: Abdali project, Fear, Safety, Security Personal, Sense of security.

1. Introduction

Sense of security

Feeling secure in large scale projects is a major factor in urban design as many authors mentioned. It is almost the most significant requirement of all societies [1]. The decrease of sense of security and unsafety cause an increase in fears of crime and fear to become a victim especially in dark areas and at night [2]. The sense of security depends on many factors among them the gender, the age, previous victimization experiences and the presence of some social and physical signs at the examined area [3]. The gender is the major issue in our case, where the fear of crime for women is higher than men [4]. The second important measure of sense of security is age, where orderly people may feel higher levels of fear than younger ones [5]. Also, the background of the cultural and social issues with the level of economic status of the people are another dimension of sense of security [6]. The third factor is the previous victimization

experiences which can influence the individuals' attitude about fear of crime. Being a victim of previous crime affects greatly future attitudes of peoples [7]. The role of victimization experiences plays a great role in the explaining the individuals' attitudes toward the investigating area. A study done in 1998 by Meyers and Chung on a neighborhood reveled that 42% of the neighborhood residents were exposed to previous victimization experience [8]. The fourth factor is the presence of some physical signs and social, such as signs of disorder at the area, like rubbish, graffiti, abandoned cars or buildings, poor lighting and narrow alleys. The other signs are social such as public drinking, begging, youth skipping school, homeless sleeping in the area and others [9].

Although the perception of the environment in a selected area may differ from one person to another according to each one experience and background but the above-mentioned factors are very important to each individual using the project [10]. Fear of crime

affects greatly the mental behavior of the individuals, and this cause people to avoid places Highlight a section that you want to designate with a certain style, and projects with potentials offenders [11]. Using camera surveillance, security personals and controlled gates are all factors that reduce the sense of fear for people [12]. An area with high levels of physical and social incivilities will have a direct and strong impact on the users. This will increase the fear of users and decrease the sense of security at users feeling. The physical and social incivilities provide a clear view about the nature of the area we are studying and also about the nature of people living inside it. If those signs are seen widely this indicates that the area lacks order and out of control, which make visitors senses fear of crime [13]. The degree of cleanest in a studied area is very important issue in urban design. If the garbage is not collected on daily basis the insects and bad smells will appear that will affect directly the image of the urban design. This side by side to graffiti, if it is existed that means losing urban design good qualities. Abandoned buildings or the lack of maintenance will become a hotspot to strangers, criminals, homeless, drinkers and smugglers. Abandoned cars has the same effect on urban design but with less impact due its size [14]. In another study by Hye-Sung Han conducted in 2020 on abandoned buildings and whether the demolition of them will improve the quality of life and decrease the feel of fear of residents. She studied 559 abandoned buildings that had been demolished in Kansas City, Missouri, between 2012 and 2016 and the result was that demolition of abandoned properties does not have any significant impact on nearby crime [15].

Narrow roads or alleys are another issue in urban design that has a great effect on the feel of fear. They usually exist in Middle Ages in many cities. Aleman studied this issue in Kansas City in 2020. In this study, eleven physical and social element variables were used. The two elements that had the most negative perceptions was the garbage and bad pavement. Good lighting and camera surveillance were two factors that improved sense of safety. Increasing vegetation was the most positive issue in reducing feel of fear and improve sense of security [16]. Narrow alleys issues regarding safety are connected directly with lighting. Poor lighting has a direct negative impact on feeling safe. Many researches were conducted emphasizing this matter among them Rezaee who conducted a research about poor lighting in some neighborhoods in

Tehran. He emphasis that poor lighting has a major effect of fear feeling and safety [17].

The Abdali Redevelopment Project

Greater Amman at the beginning of this 21st century started an economic reform process in all aspects of life. Greater Amman has developed into a city of regional importance in the global urban economical life of the Middle East. This led to the construction of the Abdali Project [18]. This study is trying to investigate a redevelopment commercial site, the Abdali Project (fig 1). Abdali project which is built on 350'000 square meters is owned by the government-owned real estate developer National Resources and Development Corporation and Horizon International for Development Ltd. Co., an international construction conglomerate specialized in investment and development of large-scale real estate projects. The total developed area is around two million square meters which will be built on three phases, and the project cost exceeded US\$ two billion [19]. Many architects and planners see the Abdali Project as model of globalization, where the its architecture and style are universal and far away from local and cultural values [20]. The first phase of the project was completed in 2016. The site consists of three main sections: 1. The Abdali Mall with an area of about 227,00 square meters which consists of four floors above ground level and two basements mainly for car parking that exists to the right side of the figure one and is presented at figure two and three. 2. The residential apartments located mainly in and around the middle of the figure one. 3. The office and retail buildings, located at the edges of the figure one. At the center of the redevelopment project there is a long pedestrian boulevard of 330 meters that extends from east to west (fig 4). The total number of cars parking are 2,400 [21].



Fig. 1. An areal view of the Abdali Project.

Source: [google.com/search?source=univ&tbm=isch&q=abdali+project+amman&fir=SGgsv9LvDPi7wM%](https://www.google.com/search?source=univ&tbm=isch&q=abdali+project+amman&fir=SGgsv9LvDPi7wM%3F)

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Fig. 2. The Abdali Mall.

Source: [https://www.google.com/search?source=univ&tbm=isch&q=abdal+project+amman&fir=SGgsv9LvDPi7wM%252CnVxUyeTsJ6cL3M%252C_%253BLSz3HTA8h0VsSM%252CK5jDwFyg4FNVqM%252C_%253BHch-F9OwruEfjM%252CoyPSbGUCiWmcJM%252C_%253BEgqTprXyepNPzM%252CyhpnsUftx3ksPM%252C_%253BogxaiaRnf7liUM%252C9M6mcpi__JU3IM%252C_%253BW0xwR980-78OgM%252CXAYNxVrrIlmeoM%252C_%253BPgPqb4tlxuyY5M%](https://www.google.com/search?source=univ&tbm=isch&q=abdal+project+amman&fir=SGgsv9LvDPi7wM%252CnVxUyeTsJ6cL3M%252C_%253BLSz3HTA8h0VsSM%252CK5jDwFyg4FNVqM%252C_%253BHch-F9OwruEfjM%252CoyPSbGUCiWmcJM%252C_%253BEgqTprXyepNPzM%252CyhpnsUftx3ksPM%252C_%253BogxaiaRnf7liUM%252C9M6mcpi__JU3IM%252C_%253BW0xwR980-78OgM%252CXAYNxVrrIlmeoM%252C_%253BPgPqb4tlxuyY5M%252C_%253B2cgCHRyxwr0a2M%252CqamSrjM9NWA8WM%252C_%253B4LeBCftBYcz6MM%252CX78jzEv1ZytRrM%252C_%253ByUKaq6_hCbP0uM%252C7v9cQhfsMfOVoM%252C_&usg=AI4_-kSn8zZfgFI62UFXZH1_BBOfzfyfKQ&sa=X&ved=2ahUKEwi2yc35iaP5AhVBnf0HHawDBKUQJkEegQIKhAC&csid=1659269007034526&biw=1366&bih=657&dpr=1#imgsrc=fm4OyghLwKawyM)

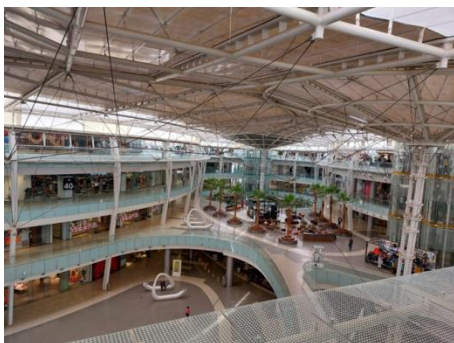


Fig. 3. The court inside the Abdali Mall.

Source: Author, 2023



Fig. 4. The Boulevard at The Abdali Project.

Source; The author, 2023

2. Methodology

A survey is conducted to the users of Abdali Project to examine the sense of security or safety of the project. The survey covers users of Abdali Project during weekdays and local inhabitants near and around the Abdali Project. A standard procedure is followed in administering the questions in numerical order to achieve rational results. The sample consisted of 450 users, randomly selected, with an equal percentage of males and females. The respond was 87% of the first sample. The questionnaire took almost two weeks to complete, where three trained researchers, in addition to the author helped in its distribution and analysis. Participants voluntarily agreed to fill out the questionnaire as presented in Table 1, were thanked at end. The survey was conducted during the last two weeks of the month of July 2023.

3. Discussion

The survey presented at Table one examines the sense of security at the Abdali Project. It consists of twenty questions. Part of them dealt with the Abdali Project as a whole, part of the questions was directed to the Abdali Mall and others to the Boulevard and car parking areas. Also, the questions dealt with the experience of the users during day and during night.

Some other questions dealt with physical and social aspects of the Abdali Project. Almost men feel more secure than women in all questions presented at Table 1. Also, most of the users feel more secure during day than night as seen in Table 1. Question number one deals with the degree of safety at the Abdali Project in general, where 81% of men and 68% of women feel safe. Those percentages are lower during night to become 79% and 61% respectively as evident in question number 2. At Abdali Mall, which is part of the whole Abdali Project, the results show better situation than the whole project due to several reasons among them the closed and protected environment as seen in figure number 3. This is noticed in Table 1, questions number three and four, that shows the percentages during day for the Abdali Mall 87% for men and 72% for women. Those percentages are lower during night to 83% and 78% respectively at Abdali Mall.

For open spaces percentages differ from enclosed spaces as seen in question number five and six at Table one. Those two questions investigate the sense of security at the Boulevard where 78% of men and 64% of women feel secure during day and 74% and 54% during night respectively. At car parking even the situation getting worse, where 70% of men and 45% of women feel safe during day and 65% of men and 34% of women during night despite the large number of security personal seen at the Abdali Mall and good lighting conditions at car parking. This is seen in questions number seven and eight. Nearly 95% of men and 88% of women think that the number of security employees are sufficient as evident in question number nine at Table 1. People in general feel safe when seeing security personal at the Abdali Project, where the percentages are 89% and 93% for men and women as seen from question number ten Table 1. The security personal are from both sexes, men and women.

Crowded areas reduce the sense of security at both men and women as seen from question number

eleven Table 1, where 76% of men and 63% of women feel secure during occasions or celebrations at the Abdali Project as evident from question number twelve Table 1. This may be due to various reasons among them pickpocket, especially during night when lighting is poor. Checking the lighting at the Abdali Project 87% of men and 85% of women think that lighting is enough during night which may reduce the feel of fear from pickpockets as seen from question number seventeen Table 1. Lighting in the Boulevard is better than other areas of the Abdali Project. This was noticed by the author during several visits to the site.

Other factors are examined in this research questionnaire such as the presence of some physical signs like rubbish, where only 2% of men and 3% of women see rubbish in and around the Abdali Project as seen from question number twelve. Rubbish is collected daily and there are workers that clean the whole area all the day and night. Graffiti is also examined where only 1% of men see graffiti inside the Abdali Project as evident in question number thirteen Table 1. This is mainly due to the heavily security personals at the site. Abandoned buildings and cars are another issue of physical signs, where nearly 65% of men and 83% of women see abandoned buildings at the Abdali Project as seen from question number fourteen Table 1. This is mainly due to the uncompleted buildings at the site especially due to financial reasons facing both the government and the developing company. An example of those uncompleted buildings is seen at (fig 5), where the facing of the external facades is not yet completed. Nearly 65% of men feel fear when walking next to abandoned buildings, where the percentage increase to 82% for women as seen in question number fifteen Table 1. This is mainly due to the possibility of hiding some people or criminals inside these abandoned buildings. Abandoned cars are rarely seen at the Abdali Project as evident from question number sixteen Table 1, where the percentages are zero for both men and women.

Table 1. Questionnaire of the sense of security at the Abdali Project

Question No.	Question	Yes %		No %	
		Men	Women	Men	Women
1.	Do you feel safe when using Abdali Project in general?	81	68	19	32
2.	Do you feel safe when using Abdali Project in	79	61	21	39

	general at night?				
3.	Do you feel safe when using Abdali Mall?	87	72	13	28
4.	Do you feel safe when using Abdali Mall at night?	83	78	17	22
5.	Do you feel safe when walking through the boulevard?	78	64	22	36
6.	Do you feel safe when walking through the boulevard at night?	74	54	26	46
7.	Do you feel safe when using the underground car parking?	70	45	30	55
8.	Do you feel safe when using the underground car parking at night?	65	34	35	66
9.	Do you think that the number of security personal is enough?	95	88	5	12
10.	Do you feel safe when you see the security personal?	89	93	11	7
11.	Do you feel fear during occasions when a large number of people exist?	76	63	24	37
12.	Do you see rubbish inside the Abdali Project?	2	3	98	97
13.	Do you see graffiti inside the Abdali Project	1	0	99	100
14.	Do you see abandoned buildings at the Abdali Project?	83	80	17	20
15.	Do you feel fear when walking next the abandoned buildings?	65	82	35	18
16.	Do you see abandoned cars at the Abdali Project?	0	0	100	100
17.	Do you think that lighting at night is enough at the Abdali Project?	87	85	13	15
18.	Do you feel fear when walking through the narrow alleys at the Abdali Project?	52	88	48	12
19.	Do you see people bugging at the Abdali Project?	0	0	100	100
20.	Do you see homeless sleeping at the Abdali Project?	0	0	100	100

Although the narrow alleys are minimal at the Abdali Project as seen from figure one, but still people feel uncomfortable and unsafe when walking through them as seen from question number eighteen, Table 1, where the percentages are 52% for men and 88% for women respectively. Narrow alleys are parallel to the main boulevard near the residential units. All other commercial activities including cafes and restaurants are located at the main boulevard. The other social

signs such as begging are almost zero percentage as seen from question number nineteen, Table 1, for both men and women. Also, homeless sleeping in the area are almost zero percentage as evident in question number twenty Table 1. This is mainly due to the tight security in and around the Abdali Project with security gates that does not allow for anyone to enter the project without security checking at all entrances. Both Abdali Project and Abdali Mall are guarded

twenty-four hours with a large number of security personnel on each and every gate. There is also a police station inside the project that controls the area. Amman in general is considered a safe city during day and night for both sexes men and women. Also the Abdali Project is inside the Abdali District which is considered one of the safest districts in Amman City.



Fig. 5. Abandoned building at Abdali Project

Source: Author, 2023

4. Results

After discussing the questionnaire outcomes several conclusions may be reached. Generally, the Abdali Project is a safe place to visit during day and night for both genders men and women. The Abdali Mall, which is the closed and covered area of our project is much safer than the whole project of the Abdali Project during day and night and for both genders. Walking through the Boulevard, which is the main open space or the spine of the Abdali Project is less safe than the Abdali Project and the Abdali Mall, and this result is both for day and night and for both genders. The case is worst for the car parking and the situation is a little bit unsafe, where the percentages of the sense of security drop below 50% for women during day and night. This may be due the location of car parking underground. When a large number of people use the

Abdali Project during occasions or celebrations the feeling of safety become less.

For physical signs that affect sense of security at the Abdali Project no rubbish or graffiti is considered as a major problem. Abandoned buildings are a problem due to the uncompleted buildings at the site. Abandoned cars are not a problem at Abdali Project. Although narrow alleys are minimal at the Abdali Project, but still people feel uncomfortable and unsafe when walking through them.

Although the narrow alleys are minimal at the Abdali Project as seen from figure one, but still people feel uncomfortable and unsafe when walking through them. For social signs begging is not a problem neither the homeless. This is mainly due to the tight security in and around the Abdali Project with security gated project that does not allow for anyone to enter the project without security checking at all entrances as mentioned before. The presence of vegetation improves the urban design and environmental qualities as mentioned before in the literature review. Although the Abdali Project have some trees and vegetation as seen in figure 6, but planting more trees will improve both environmental and physical urban design issues and will decrease the fear of users. Using roof planation was a good idea at the Abdali Project as seen in figure 7, but more trees and vegetation are needed especially at the facades of the buildings to ease for environmental issues and to improve the whole atmosphere.

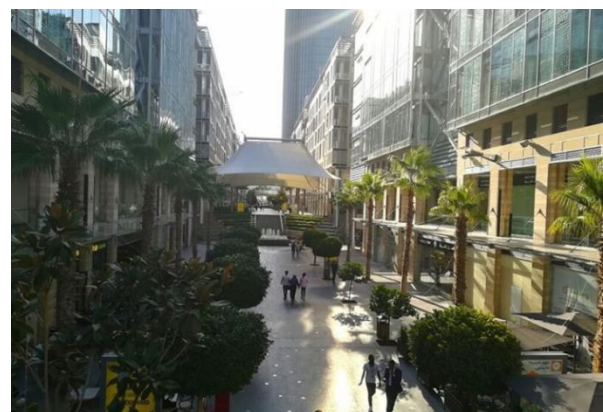


Fig. 6. Plantation at the Abdali Project.

Source: Author, 2023.



Fig. 7. Some roof plantation at the Abdali Project.

Source: Author, 2023

The Abdali Project which changed the character of the Abdali district completely as seen from figure 8 added an economical boost to the capital Amman in particular and to Jordan generally. This research which investigated the sense of security at the Abdali project and concluded that there is a certain degree of security at the project in general, despite some weak spots that should be studied further stress the idea of the importance of the redevelopment project in general but a careful attention should be paid in the future to urban design elements and sense of security. Further researches may include the whole area of Abdali and make a comparison between this project and the Abdali district in general.



Fig. 8. The Area around the Abdali Project, Abdali district

Source: https://www.google.com/search?q=abdali+project+amman&source=lnms&tbm=isch&sa=X&ved=2ahUKEwi2yc35iaP5AhVBnf0HHawDBkUQ_AUoAXoECAIQAw&biw=1366&bih=657&dpr=1#imgsrc=Air8jyLZ9ulrnM. Visited on 3/8/2022.

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