# Improving the Quality of Life in Saudi Cities Through Active Public Residential Spaces: The Case of Central Dammam City

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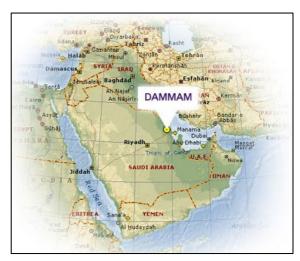
#### Abstract

There is a strong connection between public spaces and the quality of residential areas. Public spaces are essential elements for enhancing the livability of a city. However, not all public spaces are successfully playing its role in this case. Using Dammam city, Saudi Arabia as a case study, this paper examines how public spaces can impact the quality of life of its residents. A survey on a sample of residents of eight central districts of the city was conducted to explore their satisfaction with public residential spaces and its impact on their lives. Most respondents are reportedly considering changing residences due to the problems with current neighborhood public spaces. The result of this survey revealed that public residential spaces in central districts of Dammam need improvement to provide a better living environment to its residents. This study proposes some suggestions and recommendations for the relevant authority.

#### Introduction

There is a strong connection between the quality of residential districts and public spaces which are basic components of a livable city. Open spaces provide a framework which links the physical space of the metropolitan region with its social milieu (UCLG, 2016). The municipalities in Saudi Arabia have made attempts to provide public spaces in residential areas in each district to fulfill the expectations of residents. However, the residents' needs and preferences have not been adequately taken into consideration through their limited involvement in the process of planning residential public spaces. It is, therefore, possible that such spaces fail to meet the expectations of the residents, which will ultimately hinder the realisation of Saudi Vision 2030. This is the context of the study described in this paper which is based on a preliminary survey conducted with the residents in central districts of Dammam city. The objective is to understand how public open spaces in urban residential districts can improve the quality of life for the residents of Dammam city; how they improve the material conditions of the city as well the quality of life, thereby creating greater opportunities for its inhabitants, all of which is in line with the deliverables of Saudi Vision 2030.

Residential Public Spaces in Central Dammam City While there are other open spaces which are used by the public, most city authorities specify the requirements for local parks in neighbourhoods as they are the major form of public open spaces in residential areas. In the last decade, studies on the role of public spaces in sustainable development have been recognized by both local and international research communities (Okorie, Dabara, Adenipekun, Prince, & Ajiboye, 2019). The importance of public spaces can be gauged from the fact that residents experience a city as a cohesive organization only because of public spaces (Frick, 2006). Indeed, public spaces allow residents to interact more intimately with the city and form greater bonds with it.



**Fig. 1**: Location of Dammam in Saudi Arabia, Source https://www.ahqsons.com/about.htm



**Fig. 2:** Dammam city area, Source: Google Map on 20/1/2020.



**Fig. 3:** Central districts of Dammam city, Source: Google Map on 20/1/2020.

It is imperative that public open space is an element of sustainable housing design. In sustainable housing design, the process of planning is viewed as a means of fulfilling the actual needs of the inhabitants (Yilmaz & Keles, 2004). A key demand of local residents is transportation. Public spaces can accommodate different types of vehicles in a deliberate and comfortable manner. In this way, uncluttered and secure public spaces function as a glue among buildings. Thus, not only do they reinforce localities, but also develop social connections among residents (Yilmaz & Keles, 2004).

A great example of how the use of residential public spaces can enhance residents' quality of life can be found in Canada (Chisholm, 2004). Throughout Canada, various community institutions are attempting to rehabilitate degenerated public spaces and convert them into lively natural regions. To that end, they involve the communities in the process to obtain the common objective of enhancing the living standards and the livability of their localities. People are involved in planting trees and wildflowers, as well as being assigned responsibilities for the permanent care and supervision of the plantations (Chisholm, 2004). This approach has proven to be advantageous not only for the localities, but also for the residents themselves, since it strengthens their social ties and offers opportunities to all levels of the community.

In the United Nations 2030 Sustainable Development Agenda, target seven of Sustainable Development Goal (SDG) eleven incorporates a vision to provide universal access to safe, inclusive and accessible green and public spaces, especially for women, children, the aged and persons with various disabilities (Abubakar & Aina, 2019). Public spaces in the city are a fundamental element of achieving this and other goals including Goal three: good health and wellbeing, Goal five: gender equity, Goal six: clean water and sanitation, and Goal thirteen: climate action. The localization and the implementation of the SDGs, with special focus on SDG eleven: sustainable cities and communities very much depends, however, on local and national governments and their policies, as well as their support programs, such as the renovation of the Dammam Center to improve the quality of life of residents (World Health Organization, 2016).

One of the programs of Saudi Vision 2030 is related to quality of life. It has two main concepts—lifestyle and livability—which help to enhance different aspects of people's quality of life. The environment, urban design, and housing are the areas under the livability concept that are related to this study. Currently, Saudi Arabia is improving its performance in achieving the target of providing a high-quality environment, urban design, affordable housing, and protected nature in general (KSA-Government, 2017).

Many cities around the world are grappling with poor quality of life (Kumar & Khandelwal, 2018; Muhammad & Abubakar, 2020). The city of Dammam, in particular, has been facing this challenge and trying to address it specifically for some time (Alqahtany & Abubakar, 2020). Located in the Eastern Province of Saudi Arabia beside the Arabian Gulf (Figure 1), the city of Dramman is a constituent of the Dammam Metropolitan Area, which is considered to be the centre of Saudi Arabia's oil-driven economy (UN-Habitat, 2016). The city's eight central districts, namely, Alkhaleej, Albdeea, Aldawaser, Alsouq, Alnakheel, Gazaaz, Aladamah, and Albadiyah, were included in this study since they were the oldest districts of Dammam city where public open spaces were likely to be fewer in number and smaller in size.

#### Method

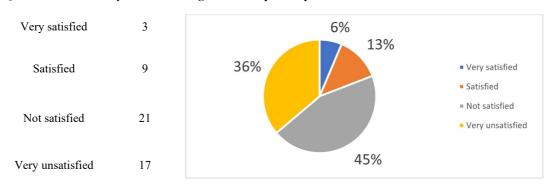
This study collected data on the residents' perceptions about the public spaces in their locality through structured interviews using a questionnaire. The qualitative data was gathered through close-ended questions. In total, 50 respondents across the eight central districts participated in the study. Six respondents were selected through convenience sampling from each district, except for the Aldawaser and Alsouq, the oldest districts in the city, in each of which seven interviews were conducted. The interview method was convenient and quick, as the interviewer (one of the authors) asked the questions, read out the possible answers, and recorded the respondent's answers directly. The aim of the interview was to assess the situation and the level of satisfaction of the people with their current residential public spaces, as well as to understand what their inclinations, level of satisfaction and preferences were. The survey results are explained below.

# Results

The first set of questions in the interviews relate to the profile of the respondents. A little more than half (62%) of the respondents were male. Around 60% were aged between 18 and 35, 28% were aged between 36 and 50, 8% were between 51 and 65 and only 4% were aged above 65. A majority of them (56%) were Saudis and the rest were non-Saudis. There were also variations in terms of accommodation types. The majority of the respondents (59%) live in rented houses, 27% live in their own homes, and 14% live in houses provided by their employers. Among the respondents, only 8% had postgraduate level education.

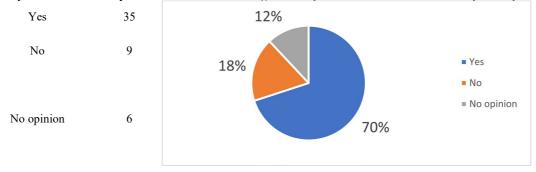
**Table 1: Level of Satisfaction** 

# Q.1 How satisfied are you with the neighbourhood public space?

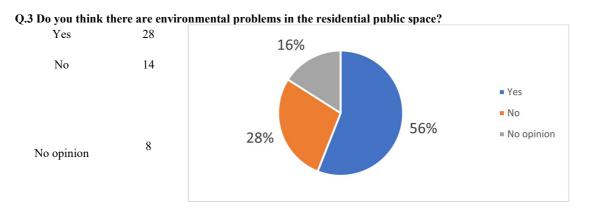


**Table 2: Identified Problems** 

# Q.2 Do you think there are problems related to the design and implementation of the residential public space?

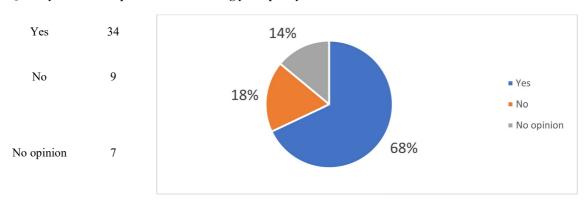


**Table 3: Residential Spaces and Environmental Problems** 



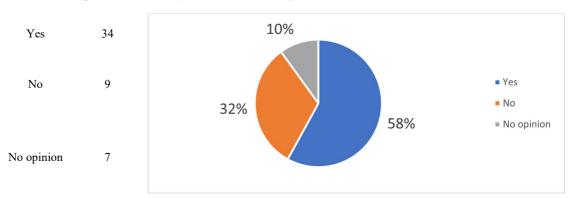
**Table 4: Quality of life** 

## Q.4 Do you feel these problems are affecting your quality of life?



**Table 5: Choice of Housing Unit** 

# Q.5 Have these problems affected your choice of housing unit?



The respondents were asked about their level of satisfaction with the public spaces in their neighbourhood. As shown in Table 1, 81% of the respondents were not satisfied or very unsatisfied. Most of them (70%) thought that the problems with those spaces were related to the spaces' design and implementation, as shown in Table 2. The respondents were asked if there were environmental problems in the public space. The majority (56%) responded in the affirmative (Table 3). The respondents overwhelmingly (68%) thought that the problems of the public spaces were adversely affecting their quality of life, as shown in Figure 4. In the next question, most of the respondents (68%) said that the design and implementation problems of open spaces were adversely affecting the quality of their lives. The data from the survey confirms the conjecture that the residents of the city, especially those in the older central districts, are not happy with the public spaces in their neighbourhoods due to design and maintenance issues.

Around three-fifths of the respondents reported that the problems with the public spaces influenced their choice of housing units (Table 5). Around half of the respondents (52%)

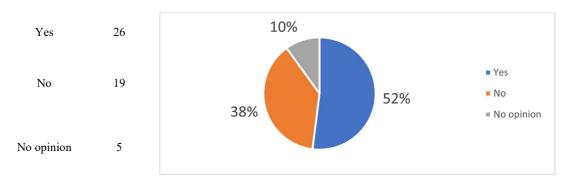
reported that they were considering changing residences because of the problems associated with the neighbourhood public space, as shown in Table 6. Exactly

three-fifths of the respondents were of the opinion that the quality of the public space influences housing prices (Table 7). The magnitude of dissatisfaction of the with public spaces is evident in the high percentage of residents who are considering relocating.

The level of satisfaction with public spaces may not be consistent across the districts however. A district-wide comparison of the share of respondents who are satisfied and dissatisfied with their neighbourhood public spaces, based on the response to the first question, is depicted in Table 8. It shows that in Alnakheel district, an equal number of respondents are satisfied and dissatisfied with public spaces. In all other districts, the share of dissatisfied residents was higher, while the highest rates (more than 80%) were in Alsouq, Alkhaleej, Gazaz, and Albadiyah.

**Table 6: Moving Out from Your Home** 

Q.6 Are you currently considering changing your home due to the problems in your surrounding immediate public space?



**Table 7: Spaces Problem and Housing Unit Price** 

Q.7 Have these problems affected the price of the housing unit?

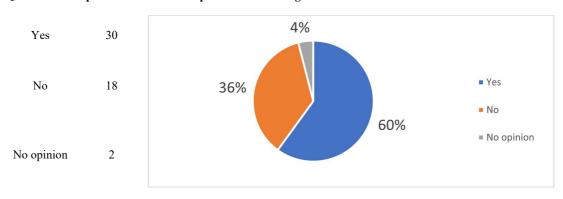


Table 8: Comparison of Level of Satisfaction among Districts

District Alkhaleej	Number Satisfied	Number Unsatisfied 5	100% 90%	86%	8	3%	83%	83%				
Albdeea Aldawaser	2	3 4 5	80% 70%						71%	67%	67%	500/
			60% 50%									50%
	_	-	40%						29%	33%	33%	
Alsouq	1	6	20%	14%	17%		17%	17%				
Alnakheel	3	3	10% 0%									
Gazaz	1	5		Alsoud I	Maleel	,	Galal	adiyah	awaser Al	hdeea .	damah	akheel
Aladamah	2	4		P	•		4	γ.		γ.	All	
Albadiyah	1	5					■ Satisf	ied <b>=</b>	Unsatisfi	ed		

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#### Conclusion

The findings from this study reveal that the residents of the central districts of Dammam are generally not satisfied with the condition of their public spaces. They also confirm that the problems with such spaces tend to affect the people's quality of life and housing choices. Therefore, there is an urgent need for action to improve the public spaces in central districts of Dammam city. Taking care of these zones and developing a plan for urban improvement will lead to increased satisfaction and better quality of life for those in these areas. This will directly contribute to achieving the Saudi Vision 2030 goals.

One potential way to have an impact in the improvement of public places in Dammam city is to introduce planning tools for land readjustment/pooling in the real estate sector. Another approach is to publish a set of manuals consisting of recommendations for upgrading urban areas and districts, highlighting different elements that could be incorporated into the city's urban planning agenda. The lessons learnt from Canada can also be adopted by the Dammam city authority to revive the public spaces in its central districts. For example, engaging residents in the improvement process can facilitate the development of common goals and approaches to improving the livability of the communities and their overall quality of life. Finally, it is important to remember that ongoing coordination between municipalities and communities is needed for better planning and the implementation of the resulting action plans.

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# **Keywords**

Residential public spaces, quality of life, Dammam city.