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The use of architecture to improve the quality of life for Saudi Arabia residents

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Table of Contents:

Introduction: 4

Research Problem: 5

The Importance of the Research: 5

Research objectives: 7

Research Hypotheses: 7

Literature Review: 7

Research Methodology: 8

Research Structure: 9

Research limits: 10

Initial reference list: 11

Research Proposal

Introduction:

Architectural design is a discipline that focuses on covering and meeting the needs and demands, to create living spaces, using certain tools and especially, creativity (MCH Article, 2020). The spaces that we design, and build can significantly impact the way we live, whether by improving our mood or performance or by making our lives easier and aesthetically the environment invites people in and makes them want to spend time in those surroundings, as opposed to feeling confined, crowded, or unproductive(Allplan article, 2021). The beauty of the surroundings is a significant factor in the quality of life.

The term 'Quality of Life' comprises a complex and multidimensional concept, which is rather difficult to define, identify, categorize, and analyze. It has a vast scope and includes various elements of social, cultural, economic, political, and environmental aspects. It is one of the important and challenging social issues of the twenty-first century. Quality of life does not remain the same in the whole life of someone, rather it varies from one stage of lifespan to another and from one type of spatial unit to another because every aspect of life of a person or persons is always influenced by the environment. The study of the quality of life of the people of an area can be at any spatial level such as local, regional, national, and international levels. It can also be studied across social structures (Multidimensional Approach to Quality-of-Life Issues, book authored by Braj Raj Kumar Sinh2019).

The 2030 vision of Saudi Arabia launched Quality-of-Life Program in 2018, to transform Saudi Arabia into a world-renowned sports and entertainment location, a global tourism hotspot, and a top-ranked country people can call home. Enhancing a wide variety of sectors, the Program focuses on the empowerment of arts and culture, the promotion of sports and leading a healthy life, and the development of more livable urban areas. As well as creating exciting new sectors and diversifying economic activity, the Program is bolstering local employment opportunities and beautifying cities across the Kingdom. These efforts combine to create a better quality of life for all (Quality-of-Life Program, 2018).

And through the research, several gaps will be identified, such as the theoretical gap, as current architectural theories, and models, do not reflect the unique factors that affect the relationship between architecture and the quality of life in the Kingdom of Saudi Arabia. We will also investigate the experimental gap, as there is a lack of comprehensive research and empirical evidence. Regarding the specific ways in which architecture can improve the quality of life for residents of Saudi Arabia. Through the study, a general questionnaire for different ages regarding the problems presented will achieve different solutions and theories from several aspects that enhance the effectiveness of the project.

Research Problem:

Theoretical Gap:

Existing architectural theories and models do not fully capture the unique factors that influence the relationship between architecture and quality of life in Saudi Arabia. Therefore, there is a need for theoretical development and refinement to provide a more comprehensive understanding of this relationship.

Empirical Gap:

There is a lack of comprehensive research and empirical evidence regarding the specific ways in which architecture can improve the quality of life for residents in Saudi Arabia. While there may be studies and projects in this area, there is a need for more focused research that investigates the relationship between architectural design, the built environment, and its impact on the quality-of-life indicators in Saudi Arabian communities. This gap reflects the limited understanding of the direct and indirect effects of architecture on the well-being and satisfaction of residents.

Main Research Question:

How can architecture be effectively utilized to improve the quality of life for residents in Saudi Arabia?

Sub-questions:

- What are the key quality of life indicators for Saudi Arabian residents, and how can architecture contribute to improving them?
- What are the successful architectural design features and strategies that have improved the quality of life in similar contexts, and how can they be effectively adapted and applied in Saudi Arabia?
- What are the challenges and barriers to implementing architectural interventions to improve the quality of life in Saudi Arabia, and how can these challenges be overcome? How does the investment in sustainable architecture projects and infrastructure development contribute to economic growth and job creation in the region?

The Importance of the Research:

Architecture plays a vital role in improving the quality of life for Saudi Arabia residents, both directly and indirectly.

Directly, architecture can contribute to a better quality of life by creating healthy, comfortable, and aesthetically pleasing spaces in which people live, work, and play. For example, well-designed buildings can:

- Improve indoor air quality and thermal comfort.
- Reduce noise pollution.
- Provide access to natural light and ventilation.
- Promote physical activity and social interaction by Creating green spaces and public parks.

- Create a sense of place and community.

Indirectly, architecture can also contribute to a better quality of life by supporting economic development, promoting sustainability, and enhancing cultural identity. For example, well-designed buildings can:

- Attract businesses and tourists.
- Unique and iconic buildings can become landmarks that attract visitors from all over the world.
- Reduce energy consumption and greenhouse gas emissions.
- Preserve and showcase traditional Saudi architecture.
- create spaces for cultural expression and celebration, such as museums, theaters, and concert halls.
- Reflect on the Kingdom's modern values and aspirations.

In recent years, Saudi Arabia has made significant investments in architecture as part of its Vision 2030 economic and social reform plan. The government is working to create more livable and sustainable cities and to promote a more vibrant cultural scene.

There are several examples of architecture in Saudi Arabia that are improving the quality of life for residents. For example:

- The King Abdulaziz Center for World Culture (Ithra) in Dhahran is a world-class cultural center that features stunning architecture and a variety of educational and entertainment facilities.
- The Diriyah Gate Development Project is a massive project that is transforming the historic city of Diriyah into a major tourist destination. The project includes the restoration of historic buildings and the construction of new museums, hotels, and other facilities.
- The Qiddiya project is a new entertainment and tourism city that is currently under construction. The project will include a variety of attractions, including a Six Flags amusement park, a Formula 1 racetrack, and a performing arts center.
- The King Abdullah Financial District (KAFD) in Riyadh: This mixed-use development features state-of-the-art office towers, luxury hotels, and retail outlets, as well as several public spaces, including parks, plazas, and museums.
- The Red Sea Project: This ambitious tourism development is being built on a group of pristine islands in the Red Sea. The project will include several luxury resorts, hotels, and other amenities, all designed to minimize environmental impact and showcase the natural beauty of the region.

These are just a few examples of the many ways in which architecture is being used to improve the quality of life for Saudi Arabia residents. As the country continues to grow and develop, architecture will play an increasingly important role in creating a more livable, sustainable, and vibrant future for everyone.

Research objectives:

- **Creating thoughtful urban planning:** ensuring well-designed cities and neighborhoods with easy access to amenities, green spaces, and efficient transportation systems, enhancing the overall living experience.
- **Access to public places:** parks, playgrounds, and community centers, allows individuals and families to engage in various activities that promote socialization and physical health, green spaces are also known to have a positive effect on the environment and climate. They help to combat the urban heat island effect, mitigate air pollution, and provide habitat for wildlife. Additionally, they can help to reduce noise pollution and provide natural cooling to surrounding areas.
- **Create more sustainable and livable urban environments:** Implementing sustainable design and construction practices can lead to eco-friendly buildings, resource conservation, and environmentally conscious urban development, thus positively impacting both residents and the environment.
- **Boost economic growth and job creation:** This includes investing in sustainable and innovative architecture projects. The government is investing in several infrastructure projects, such as the development of new roads and railways. This investment is creating new jobs and boosting economic growth.

Research Hypotheses:

- There is a significant relationship between architecture and the quality of life of Saudi Arabia residents.
- Access to green spaces and natural light has a positive impact on the quality of life for Saudi Arabia residents.
- pedestrian-friendly communities have a positive impact on the quality of life for Saudi Arabia residents.
- Investing in infrastructure development and architectural projects will create jobs and stimulate the region's economy.

Literature Review:

Previous research has recognized the importance of architectural design and its impact on the quality of life and society in Saudi Arabia. Studies have highlighted various factors such as natural lighting, ventilation, open spaces, cultural identity, and sustainability (Alharbi, 2023). The integration of sustainable systems within

architectural design has also been explored, emphasizing the emulation of natural systems and the coordination of spatial relationships between buildings and their surrounding environments (Salman & Hameed, 2020). Additionally, research has examined the provision of public open spaces in Saudi cities, identifying deficits and advocating for proactive planning and design that meets international standards (Addas & Alserayhi, 2020).

However, there are gaps and limitations in the existing literature. The reviewed studies lack a comprehensive understanding of the broader urban context, cultural influences, and specific challenges faced in Saudi Arabia. They also fall short of establishing empirical evidence linking architectural interventions to improved quality-of-life outcomes. Moreover, the research on public open spaces primarily focuses on numerical measurements rather than considering the value and quality of these spaces. There is a need for a systematic approach that addresses residents' needs, safety, and desires (Addas, 2020).

The relationship between social and economic reforms, urban megaprojects, and sustainable urbanism in Riyadh has been explored, highlighting their potential to improve the quality of life for residents and attract foreign investment (Klingmann, 2023). However, this research fails to thoroughly address potential socio-spatial inequalities and displacement of marginalized populations caused by the megaprojects. It also lacks a comprehensive analysis of the long-term sustainability and inclusivity of the proposed developments.

Despite the previous research literature on architecture, quality of life, and urban development in Saudi Arabia, there is still a need for comprehensive investigations that consider the broader urban context, cultural influences, and specific challenges faced in the country. Additionally, empirical evidence linking architectural interventions to improved quality-of-life outcomes is lacking. By addressing these gaps, the current study aims to contribute to the understanding and implementation of architecture to enhance the quality of life for residents in Saudi Arabia.

In conclusion, while previous research has shed light on various aspects of architecture, and quality of life, there are still significant gaps and limitations in the existing literature. The current research aims to address these gaps by providing a more comprehensive understanding of the relationship between architecture and quality of life in Saudi Arabia. By doing so, this study aims.

Research Methodology:

The study employed a descriptive approach using qualitative methods to explore the effective utilization of architecture in enhancing the quality of life for residents in the Kingdom of Saudi Arabia. This approach involved detailed observations, data collection, and analysis aimed at understanding and describing the status of architectural impact on residents' quality of life.

Riyadh region residents were selected for the study, with a sample size of 170 individuals from all municipalities in the city of Riyadh. The descriptive method allowed for a comprehensive overview and analysis of how architectural features influence various aspects of residents' lives in Saudi Arabia. This in-

depth understanding enabled the formulation of informed recommendations for architectural interventions that could contribute to improving the quality of life for Saudi citizens.

Research Structure:

Timeline

Weeks 1-2: Research Title

- Choose a topic interesting and feasible.
- Narrow the topic down to something manageable.
- Conduct preliminary research to learn more about the topic.
- Brainstorm a list of potential research titles.
- Evaluate potential titles and choose the best one.

Weeks 3-6: Research Proposal

- Creating a detailed research proposal.
- Overview of the study's introduction.
- Defining the research objectives.
- Importance and relevance of the topic.
- Background information on Saudi Arabia's architecture and its impact on residents' lives.
- Collecting and reviewing existing literature on architecture and quality of life in Saudi Arabia.
- Identifying studies and theories relevant to the research.
- Selecting the appropriate research methodology (e.g., surveys, interviews, case studies).

Weeks 7-10: Theoretical content

- Designing data collection tools and instruments.
- Conducting surveys.
- Collecting relevant data on architecture and quality of life factors.
- Processing and analyzing the collected data.
- Compiling research findings.
- Drafting discussion points based on the results.
- Making initial conclusions.
- Reviewing Editing, proofreading, and ensuring coherence in the research.

Weeks 10-11: Research Writing, Review and Editing

- Writing a research report.
- Organizing the research into distinct sections.
- Refining the discussion and conclusions based on the findings.
- Reviewing the draft research for accuracy and consistency.
- Editing, proofreading, and ensuring coherence in the research.

Weeks 12: Finalization and Submission

- Finalizing the research based on feedback and reviews.
- Preparing the research for submission.

Research limits:

Architecture can play a significant role in improving the quality of life for Saudi Arabia residents in various ways, including enhancing physical and mental well-being, promoting social cohesion, and fostering economic development. However, there are certain research limits that need to be addressed to fully realize the potential of architecture in this regard.

1. Limited understanding of the impact of architectural design on occupant behavior and health:

While there is growing evidence that architectural features can influence occupant behavior and health, there is still a need for more comprehensive research in this area. This includes studies on the impact of natural light, ventilation, thermal comfort, and layout on physical and mental well-being.

2. Insufficient research on the role of architecture in promoting social cohesion and community building:

Architecture can foster social interaction and community engagement by creating spaces that encourage social connection and facilitate activities. However, there is limited research on how to effectively design these spaces and integrate them into the urban fabric.

3. Lack of research on the economic benefits of architectural interventions:

While there is a general understanding that good architecture can contribute to economic development by attracting businesses and enhancing productivity, there is a need for more specific research on the quantifiable economic impacts of architectural interventions.

4. Need for more interdisciplinary research:

Addressing the research limits in architectural design requires collaboration between architects, urban planners, sociologists, psychologists, public health experts, and other relevant disciplines. This will ensure that architectural solutions are informed by a comprehensive understanding of human needs and behavior.

By addressing these research limits, architecture can play a more significant role in improving the quality of life for Saudi Arabia residents and contribute to a more sustainable and prosperous future for the country.

Initial reference list:

1. S. Salman, T. M. Hameed, 2020, Sustainability Systems in Architecture, Iraqi Journal of Architecture and Planning, Vol. 19, 13-24
2. Addas, G, Alserayhi ,2020, Quantitative Evaluation of Public Open Space per Inhabitant in the Kingdom of Saudi Arabia: A Case Study of the City of Jeddah, SAGE Open April-June 2020,1–18
3. Addas, (2020). Enhanced Public Open Spaces Planning in Saudi Arabia to Meet National Transformation Program Goals. Current Urban Studies, 8, 184-204.
4. Klingmann, A. (2023), Rescripting Riyadh: how the capital of Saudi Arabia employs urban megaprojects as catalysts to enhance the quality of life within the city's neighborhoods, Journal of Place Management and Development, Vol. 16 No. 1, pp. 45-72.
5. M. A. Alharbi, 2023, Impacts of Architectural Design on Quality of Life and Society, Journal of Al-Azhar University Engineering Sector, vol. 18, 641 – 650.
6. Saudi Green Building Forum, 2020, <https://sgbf.sa/>.
7. Vision2030, published 2016, National Transformation Program, <https://www.vision2030.gov.sa/>.
8. Vision2030, published 2018, Quality of Life Program, <https://www.vision2030.gov.sa/>.
9. Allplan article, published 2021, Improving Quality of Life Through Architecture, <https://blog.allplan.com/en/improving-quality-of-life-through-architecture> .
10. MCH article, published 2020, What is the architectural design, <https://www.mchmaster.com/news/architectural-design-definition-types-and-examples/>