

Quality of Life: A Case Study of the City of Benghazi – Pilot Study

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جودة الحياة ، دراسة حالة مدينة بنغازي – دراسة تجريبية

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Abstract:

This study aims to explore the indicators of urban quality of life in the city of Benghazi, as a fundamental element in achieving residents' satisfaction and developing an integrated urban environment. It adopts a descriptive-analytical approach through a questionnaire conducted with 83 participants of various ages and professions.

The results revealed discrepancies in the availability of environmental, physical, and social indicators across the city—such as green spaces, lighting, infrastructure, and transportation—highlighting the need for urban planning interventions to enhance quality of life.

Key recommendations include: Strengthening community participation in urban planning. Enhancing infrastructure and public services. Improving transportation, mobility, and public amenities. Promoting environmental and planning sustainability. This study is considered one of the first initiatives in Libya to highlight the concept of urban quality of life as a central pillar of sustainable urban development.

Keywords: quality of life; urban design; urban planning; Benghazi city.

المخلص:

تهدف هذه الدراسة إلى استكشاف مؤشرات جودة الحياة الحضرية في مدينة بنغازي، كعنصر أساسي في تحقيق رضا السكان وتطوير بيئة حضرية متكاملة. وتعتمد الدراسة على منهج وصفي تحليلي من خلال استبيان أُجري على 83 مشاركاً من مختلف الأعمار والمهن.

كشفت النتائج عن تباين في توافر المؤشرات البيئية والعمرانية والاجتماعية في جميع أنحاء المدينة - مثل المساحات الخضراء والإضاءة والبنية التحتية والنقل - مما يُبرز الحاجة إلى تدخلات تخطيط حضري لتحسين جودة الحياة. تشمل التوصيات الرئيسية: تعزيز مشاركة المجتمع في التخطيط الحضري. تحسين البنية التحتية والخدمات العامة. تحسين النقل والتنقل والمرافق العامة. تعزيز الاستدامة البيئية والتخطيطية. تُعتبر هذه الدراسة من أوائل المبادرات في ليبيا التي تُبرز مفهوم جودة الحياة الحضرية كركيزة أساسية للتنمية الحضرية المستدامة.

الكلمات المفتاحية: جودة الحياة؛ التصميم الحضري؛ التخطيط الحضري؛ مدينة بنغازي.

Introduction and Background:

QoL contributes to individual and societal well-being, affecting happiness, health, social relationships, and professional success. Key influencing factors include general health, economic stability, social connections, emotional satisfaction, environmental conditions, and lifestyle balance.

Methods of measuring QoL vary between objective indicators (e.g., demographics, education, housing) and subjective indicators (e.g., satisfaction with services). Urban QoL refers to the built environment's ability to support daily activities and accommodate human needs across social, physical, and environmental dimensions.

Quality of Life: Concept, Importance, Measurement, and Urban Application: Quality of life results in numerous benefits and a positive impact on individuals and society at large. When we experience a high quality of life, we feel happy and content, which reflects positively on our general health and vitality. It also affects our social relationships and professional success, ultimately leading to personal well-being and life success(1) .

There are several key factors that influence quality of life and determine our level of happiness and personal satisfaction. Here are some of the main ones:

General Health:

Health is one of the most important factors of quality of life. If you suffer from chronic health issues or follow an unhealthy lifestyle, your quality of life is likely to be low. Therefore, one must focus on physical fitness by engaging in daily exercise, eating healthy food, and getting enough rest and sleep.(1)

Financial and Economic Status:

Economic stability greatly influences quality of life. Meeting your basic needs and achieving financial security enhances feelings of safety, confidence, and satisfaction. It is crucial to manage financial resources wisely and invest smartly to ensure long-term stability. (1)

Social Relationships:

Positive and supportive relationships significantly contribute to a higher quality of life. Being surrounded by such relationships enhances feelings of belonging and social participation. Investing in strong relationships through consistent communication and community involvement is key.(1)

Emotional and Psychological Satisfaction:

Internal happiness and emotional well-being are vital indicators of quality of life. Achieving this involves positive thinking, handling challenges healthily, and seeking emotional support from family and friends.(1)

Environmental Conditions:

Living in a clean and sustainable environment boosts one's quality of life. Contributing to sustainability through recycling, conserving natural resources, and participating in environmental initiatives is crucial.(1)

To improve quality of life, individuals can:

Achieve Work–Life Balance:

Allocate time for rest, recreation, and relaxing activities to recharge and maintain vitality.(2)

Invest in Strong Social Relationships:

Engage in group activities and volunteer work to expand social connections.

Pursue Continuous Learning and Personal Development:

Enhance life quality through continuous education, skill–building, reading, and using educational resources.

Contribute to Society:

Serving others and participating in community development fosters a sense of purpose and internal satisfaction.

Protect the Environment:

Simple actions like recycling, reducing resource consumption, and using alternative transportation methods can significantly contribute to environmental sustainability(2) .

Measuring Quality of Life:

The criteria for measuring quality of life vary depending on whether the research relies on precise statistical indicators (quantitative) or subjective measures (qualitative), which are more common in human sciences. Rogerson, Natalia Barbarino, and others have emphasized the importance of combining both subjective and objective dimensions, with specific indicators developed for each field of study(2) .

Definitions of Quality of Life:

Galster and Moore:

Quality of life is not only about economic aspects but also includes housing, health, and social relationships—indicating a shift from purely economic welfare to holistic well-being(1) .

Malcolm Shuchner:

Quality of life is the sum of interactions between social, economic, environmental, and health conditions affecting human development and social integration(1) .

Dimensions of Quality of Life:

Objective Dimension:

Involves measurable indicators like population growth, household size, birth/death rates, disease rates, employment levels, housing quality, education levels, and availability of public services(4) .

Subjective Dimension:

Focuses on residents' satisfaction with services and their perceived effectiveness(4) .

Urban Quality of Life:

Urban quality of life refers to the built environment and how it supports human activities across various urban issues such as: Urban mobility, Public space quality, Accessibility to services, Public safety, Environmental respect, Health and disability inclusion. All these aspects are critical for building a livable urban future(1) .

Urban Quality of Life Definition: Urban quality of life is linked to urban planning aimed at achieving sustainable development and individual well-being. It encompasses multiple interconnected dimensions: Environmental. Social, Physical, Mobility-related, Economic, Psychological and Political. Standard

criteria include infrastructure services such as water, electricity, sewage systems, healthcare, education, and green spaces(9) .

Tokyo as a Model of Urban Quality of Life in High–Density Cities:

A. Environmental Urban Quality:

Tokyo has invested in eco–friendly technologies, modernized old energy infrastructure, and aimed to achieve zero emissions by 2050—achieving sustainability and environmental resilience(9) .

B. Physical Urban Quality:

Tokyo redevelops low–density areas into multifunctional smart–growth spaces, builds earthquake– and fire–resistant infrastructure, and expands green spaces. Public roads are made pedestrian– and cyclist–friendly, and the waste management system is well–developed. The city also supports emission–free housing(9) .

C. Urban Mobility:

Tokyo has a highly efficient, punctual public transportation system. Many residents do not own cars due to the availability of comprehensive rail and bus networks. It also aims to reduce carbon emissions from transport by 60%(9) .

D. Social Urban Quality:

Despite high living costs, Tokyo provides excellent education, ranking among the top global systems. Healthcare is of high quality, with mandatory insurance and nonprofit hospital operation led by medical professionals. (9)

Research Problem: The study of quality of life (QoL) in cities has become a critical factor in identifying priorities and public policies concerned with urban planning and design. This study, therefore, addresses QoL as a key element and indicator for user satisfaction and as a benchmark for aligning with urban planning and design values.

.Study Hypothesis: A descriptive exploratory study of quality of life indicators in the city of Benghazi.

Study Objectives: To study quality of life indicators based on the opinions of a selected sample of residents. To analyze the results and data to reach conclusions. To examine the impact of QoL indicators on urban design.

Importance of the Study: QoL has become an important topic in recent years. Few studies have addressed this subject in Benghazi or Libya in general, making this one of the pioneering studies in this field.

Time and Spatial Boundaries: The study covers the city of Benghazi and spans nine months.

Methodology: A survey was conducted among an available sample of 83 participants, including students, engineers, and doctors aged between 18 and 48, with 31 males and 52 females. The collected data was analyzed to draw conclusions and provide recommendations.

Previous Studies:

Several studies were reviewed regarding the relationship between QoL and factors such as social behavior, future aspirations, psychological well-being, and urban density.

.1Bushra Enad Mubarak(2008)

Title: Quality of Life and Its Relationship with Social Behavior among Women Delayed in Marriage

Journal: Journal of the College of Arts, Issue 99, 2008

Summary:

The study found that women who are delayed in marriage do not experience a sense of quality of life. Differences were observed based on age, with working women showing a greater impact.

.2Afnan Ahmad Hussein Al-Salamin, Mohammad Ajwa(2018)

Title: Quality of Life and Its Relationship to Future Ambition among a Sample of Arab Negev Students Studying in the Faculty of Education at Hebron University (Master's Thesis)

Institution: Hebron University, Faculty of Graduate Studies, 2018

Summary:

The study was conducted on 507 male and female students and concluded that there is a relationship between quality of life and students' future ambitions. There were differences in quality of life based on the level of education. However, there were no significant differences based on gender, age, or department.

.3Saleeha Laghzali, Sabah Ayeshe(2020)

Title: The Level of Psychological Quality of Life Among School Students

Conference: First National Forum on Quality of Life and Sustainable Development in Algeria, February 2020

Summary:

The study examined the psychological quality of life among secondary school students in Chlef Province, using a sample of 100 male and female students. The researchers used Ryff's Psychological Well-being Scale (1989), translated by Sabah Ayesh (2017). The findings showed that the sample had a high level of psychological quality of life. The most prominent dimensions, in order, were: personal growth, life goals, autonomy, positive relationships (ranked fifth), and environmental mastery (ranked last).

.4Hagar Magdy Lotfy, Noha Mohamed Nabil, Jihan El-Sayed Abdel Daim
(2023)

Title: Towards Achieving Urban Quality of Life in High-Density Cities

Journal: Journal of Engineering Research, Issue 178, June 2023

Summary:

Rapid urbanization has placed tremendous pressure on urban development in many cities. High-density development has become a growing area of interest worldwide. While low-density urban environments are generally viewed as more livable due to less crowding, noise, and pollution, high-density urban areas are often seen as unlivable. However, quality of life and livability are complex and multifaceted. High urban density has both positive and negative impacts on livability and the urban quality of life.

Study Methods and Design:

Location: Benghazi

Duration: 9 months

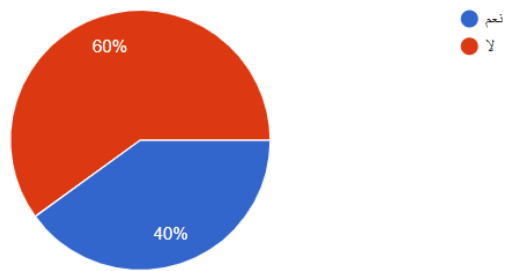
Sample: 83 individuals of both genders, using descriptive-analytical cross-sectional study methods.

Tool: Questionnaire

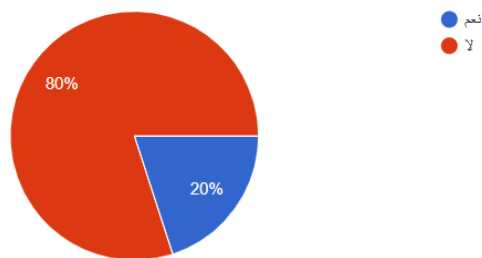
.Results:

(based on surveyed indicators): { blue : yes, red: no }

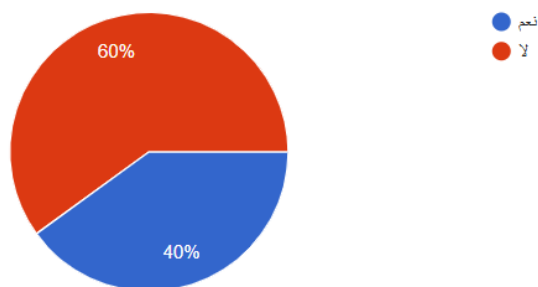
1– Availability of green spaces



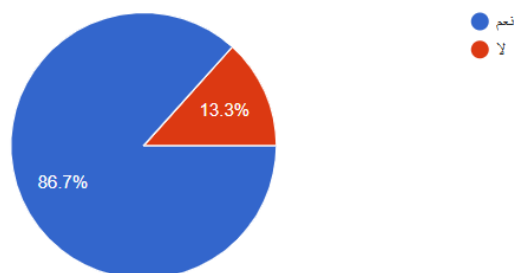
2– Easy and convenient access to green spaces



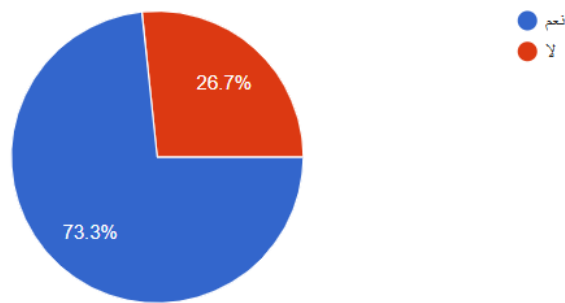
3– Adequate ventilation in residential areas



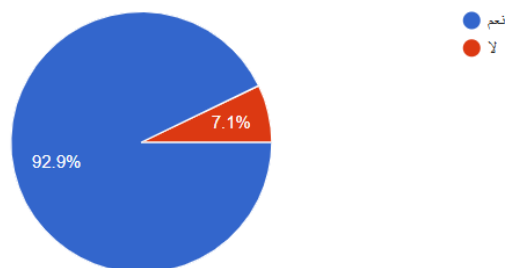
4– Availability of good natural lighting when moving through urban spaces



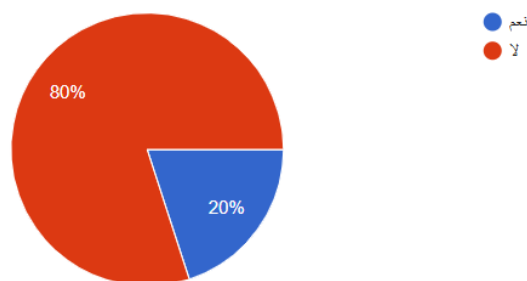
5– Availability of nighttime artificial lighting in residential areas



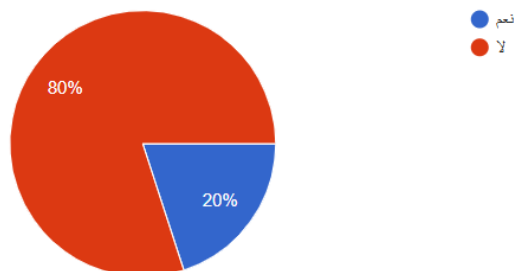
6– Presence of unpleasant odors in residential spaces



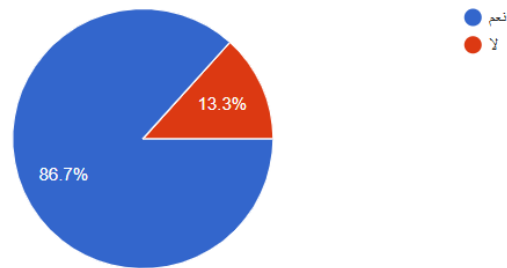
7– High cleanliness standards in urban spaces



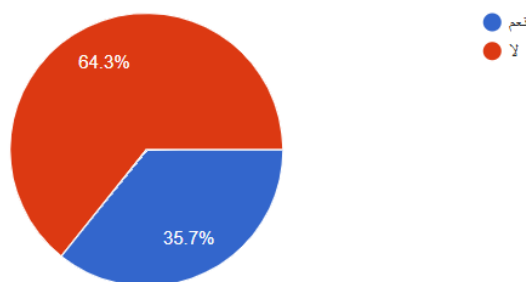
8– Availability of electricity and infrastructure across different urban areas



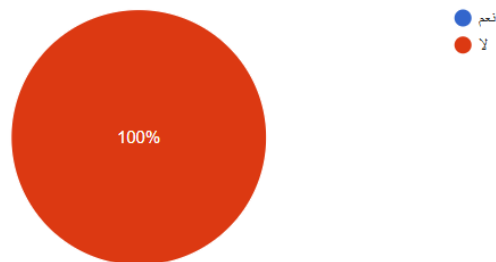
9– Variety in the size and type of urban spaces



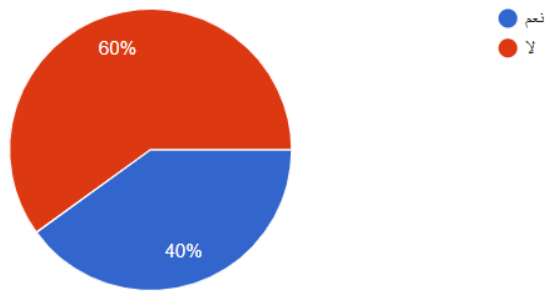
10– Existence of a transportation network within urban areas



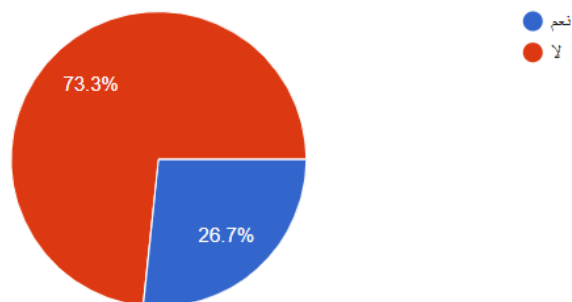
11– Availability of diverse transport modes for cars, pedestrians, and bicycles



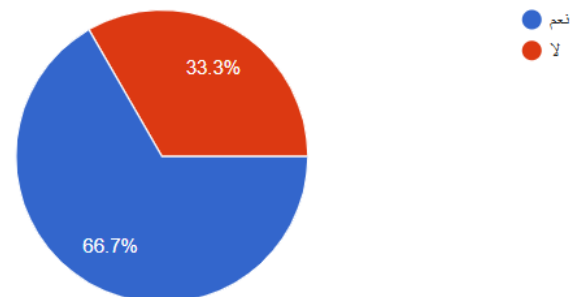
12– Availability of landscape design elements between urban buildings



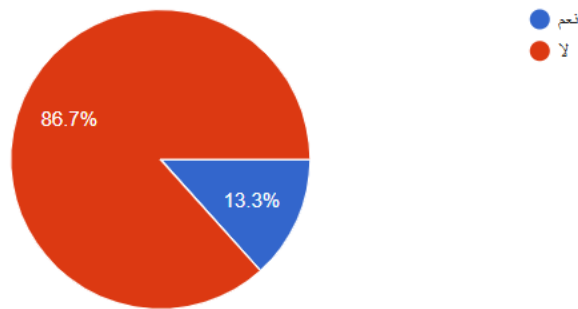
13- Adequate provision of parking spaces



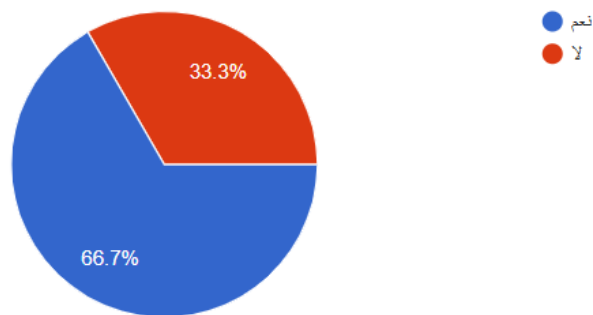
14- Availability of maintenance services for residential buildings



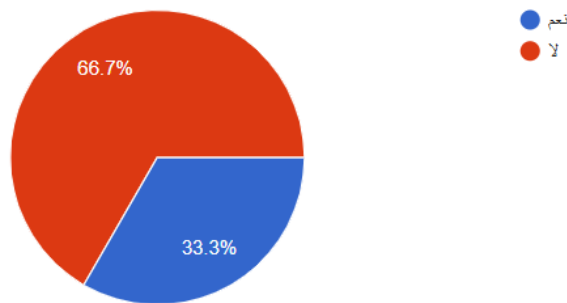
15- Availability of emergency evacuation routes



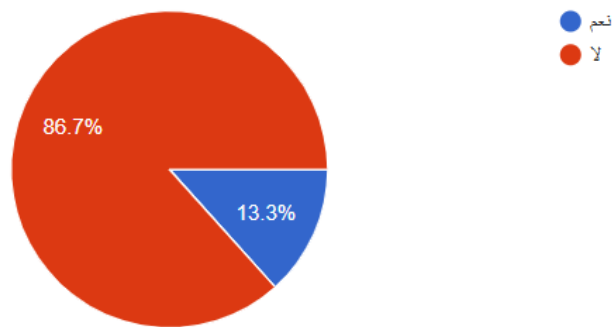
16- Availability of sidewalks in urban areas



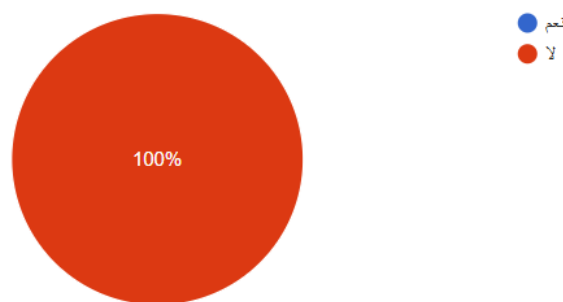
17- Pedestrian pathways free of obstacles



18- Availability of public transportation



19– Availability of dedicated bicycle lane networks



In the study the dependent variable is the Urban Quality of Life and the independent variables: Urban Environment (For example: availability of green spaces, air quality, natural light, ventilation), Urban Mobility (For example: availability of public transportation, pedestrian paths, bicycle lanes). Public Services (For example: electricity, sanitation, hygiene, building maintenance, emergency services.), Urban Planning and Green Spaces. Diversity of Uses, Distribution of Services, Design of Urban Spaces. Cleanliness and Public Health. Level of Neighborhood Cleanliness, Waste Management, Level of Health Services. Social and Cultural Factors. Sense of Belonging, Social Participation, Community Activities. Economic Conditions. Financial Stability, Availability of Job Opportunities, Ability to Meet Basic Needs. Community Participation. Resident Participation in Decision-Making and Urban Planning. The form of the relationship:

All of the above variables → affect → the quality of urban life.

The relationship between the variables is a direct influence, as environmental, social, service, and economic factors all contribute to determining the level of urban quality of life in a city.

Conclusion:

- 1– Urban QoL requires continuous evaluation and monitoring.
- 2– Environmental, social, cultural, and material aspects are vital for assessing QoL.
- 3– Transport networks (including pedestrian and bike paths) are essential for adapting to modern urban thinking.

.Recommendations:

- 1– Encourage active community involvement in urban planning and design.
- 2– Improve infrastructure and public services (electricity, sewage, etc.)
- 3– .Prioritize green spaces and integrated development.
- 4– Focus on transportation systems, walkways, bike paths, and public transit.
- 5– Enhance public cleanliness and health services.
- 6– Emphasize sustainable urban planning and design practices.

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