



**PLANNING MALAYSIA:**

*Journal of the Malaysian Institute of Planners*

**VOLUME 22 ISSUE 6 (2024), Page 389 – 403**

## **A QUALITATIVE STUDY ON THE FACTORS INFLUENCING SOCIAL COHESION IN MUSCAT, OMAN**

**Abdullah Rashid Said AlGhassani<sup>1</sup>, Mohammad Javad Maghsoodi Tilaki<sup>2</sup>  
\*, Narimah Samat<sup>3</sup>, Ahlam Al Hanai<sup>4</sup>**

*<sup>1,2,3</sup>, School of Humanities,*

**UNIVERSITI SAINS MALAYSIA**

*<sup>4</sup>Center for Environmental Studies and Research (CESAR),*  
**SULTAN QABOOS UNIVERSITY**

### **Abstract**

Social cohesion, which refers to connectedness and solidarity among groups in society, is crucial to achieving an inclusive and sustainable development. However, social cohesion is influenced by various factors that can be either physical or non-physical. Given the limited studies on promoting social cohesion in Oman, this research adopts a qualitative approach to identify those urban physical factors that influence social cohesion in the governorate of Muscat. Data were collected via semi-structured interviews with 12 experts in relevant fields in Oman. By reviewing government initiatives aimed at enhancing social cohesion, this study highlights the importance of health and education infrastructure, community and open spaces, affordable housing, and walkable neighborhoods in promoting social interaction and cohesion. Through a thematic analysis, this study identified 31 codes and 8 themes, namely, 1) land use and connectivity, 2) community and open spaces, 3) activity centers, 4) affordable housing, 5) access to facilities, 6) porous boundaries, 7) health and education infrastructure, and 8) walkable neighborhoods. The findings of this study provide nuanced insights into the interplay between social cohesion and urban physical factors and offer valuable perspectives for policymakers, urban planners, and stakeholders involved in sustainable urban development in Muscat.

**Keywords:** Social cohesion, Physical factors, Muscat, Social sustainability, Smart city

<sup>2</sup> Corresponding Author. Email: maghsoodi@usm.my

## **INTRODUCTION**

Social cohesiveness has become a significant priority for policymakers, scholars, and practitioners in recent decades as social structures have developed and shifted away from mere economic growth considerations and toward a holistic societal well-being (Castanho Silva, 2015; Kapoor et al., 2017; Mac Fadden et al., 2021; Moustakas, 2022). Social cohesiveness plays a critical role in achieving social sustainability in urban areas by enhancing the quality of life of their inhabitants (Zhang et al., 2021). Neighborhood architecture and design may also significantly contribute to promoting social cohesion (Mouratidis & Poortinga, 2020).

However, the extant policies for promoting social cohesiveness face several challenges due to the lack of a precise definition and analytical framework (Khaile et al., 2022). Social cohesion and sustainability can also be significantly influenced by neighborhood quality and social interaction (Liu et al., 2020; Narimah et al., 2024). Fostering social cohesiveness is essential in accomplishing social sustainability goals by enabling communities to flourish peacefully while preserving the values of justice, equality, and social well-being (Fatourehchi & Zarghami, 2020). The process of contextualization is also crucial due to the regional variations and wide array of elements involved in promoting social unity across nations.

The Omani society underwent a dramatic transition from a traditional, conservative society to a modern one as the country started to embrace globalization and introduce improvements in education, living standards, job market access, mass media, and communication (Al-Barwani & Albeely, 2013). The influence of globalization on individuals, families, and societies is noteworthy, spanning their employment, working conditions, income, social protection, culture, identity, inclusion/exclusion, and societal cohesiveness. Al-Barwani and Albeely (2013) identified two threats to Omani family cohesion, namely, internal threats (e.g., lack of democratic values and practices, lack of commitment to family roles, lack of cooperation and support among members, inflexible decision-making processes, and self-centeredness) and external threats (e.g., economic circumstances, social factors, peer pressure, media exposure, and global consumerism). They believed that having a strong cohesiveness will help Omani families face future difficulties. However, social cohesion in Oman has received limited research attention. According to Moustakas (2023), the literature on social cohesion has not shed much light on two key areas, namely, the neglect of governance and formal institutions and the idea of shared values. Therefore, a comparative analysis of these factors should be conducted across different cultural and geographical settings, and their policy implications warrant further exploration. Clarke et al. (2023) also highlighted some gaps in the present understanding of social cohesion and urban green spaces, with most studies focusing on developed nations and lacking diverse perspectives. By addressing these deficiencies, researchers can improve the current understanding of social

cohesion and encourage the creation of highly inclusive and resilient communities.

This study aims to assess the influence of urban physical factors on promoting social cohesion in Muscat and to evaluate the effect of the implemented policies and interventions on enhancing social cohesion and achieving social sustainability in Muscat.

## **LITERATURE REVIEW**

### **Definition and Conceptualization of Social Cohesion**

Early notions about social cohesiveness can be traced back to the 14th century after Ibn-Haldun introduced the concept of *asabiyyah*, which emphasized group emotion and solidarity (Alatas, 2006; Dragolov et al., 2016; Hassan, 2006). Modern historians, such as Emile Durkheim, expanded on this notion and identified mechanical and organic solidarity as essential to preserving social order (Durkheim, 1922). Despite the ongoing debates on the definition of this concept, contemporary work tends to focus on narrow conceptualizations and emphasize essential features, such as social ties, identity, common good orientation, shared values, equality, and quality of life (Dragolov et al., 2016; Schiefer & van der Noll, 2017). One of the definitions of social cohesion was proposed by Clarke et al. (2023), who defined this concept as “the combined reasons for members to remain within a social group, and likely involves a mix of neighborhood attachment, trust, sense of community, and social interactions.”

### **Theoretical Perspectives on Social Cohesion**

Previous studies have investigated social cohesion from multiple perspectives as detailed below.

1. **Historical and Sociological Perspectives:** Some studies have examined the historical roots of social cohesiveness using the 14th-century texts of Ibn-Haldun as its earliest formulation. These studies emphasize the contributions of several academics, including Durkheim and Georg Simmel. Durkheim’s distinction between mechanical and organic solidarity, together with Simmel’s observations on social interactions, provide fundamental sociological perspectives on social cohesiveness (Moustakas, 2023).
- 2- **Multidimensional Model perspective:** Some studies view social cohesiveness as a multidimensional construct and emphasize the significance of subjective impressions and objective behaviors in comprehending this concept. They define three levels of social cohesion, namely, macro, meso, and micro social cohesion, which represent relationships at the societal, group, and individual levels, respectively. This perspective emphasizes the complexities of social cohesiveness and its manifestation across many social circumstances (Lalot et al., 2022).

### **Factors Influencing Social Cohesion**

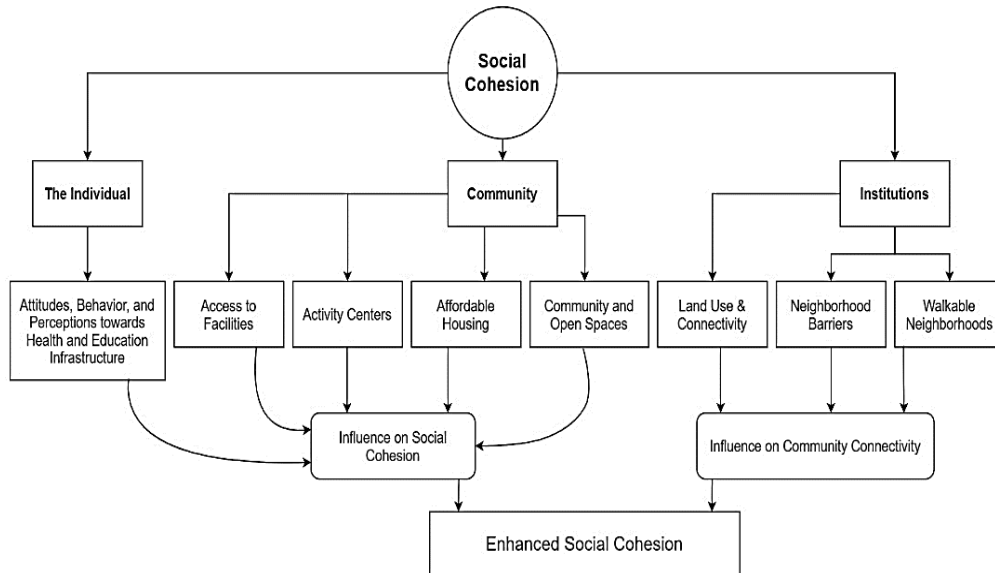
Social cohesiveness is influenced by a variety of factors, including group structure, sense of belonging, money, education, globalization, diversity, and income disparity. Education and income are particularly important in improving social relationships and public awareness, but globalization and economic disparity may be damaging to cohesiveness (Larimian et al., 2020). Henderson et al. (2016) identified the following factors that influence social cohesion:

1. **Perceived Trust and Shared Values:** In a neighborhood environment, social cohesiveness is defined by people feeling linked to one another, trusting one another, and adhering to common norms.
2. **Physical Disorder and Perceived Safety:** Low-income areas have lower levels of social cohesiveness compared with higher-income neighborhoods, which might be attributed to high levels of physical disorder that results in feelings of a hazardous environment and isolation from neighbors.
3. **Neighborhood Incivilities:** Low-income communities have a larger concentration of neighborhood incivilities, which may influence the residents' social cohesiveness and perceived stress levels.
4. **Gender Differences:** The interaction between the social environment and mental health outcomes may change according to gender.

## **METHODOLOGY**

### **Research Design**

The adopted research design introduces a framework for analyzing social cohesion in Muscat at the individual, community, and institutional levels (Fonseca et al., 2019). This framework highlights the interdependencies among these levels and the necessity for compatible norms and values to foster social cohesion. Key factors at the community level include access to facilities, activity centers, affordable housing, and community and open spaces, key factors at the individual level include attitudes, behavior, and perceptions toward health and education infrastructure, and key factors at the institutional level include land use and connectivity, neighborhood barriers, and walkable neighborhoods as shown in Figure 1.



**Figure 1:** Conceptual framework.

Source: Moustakas, 2023; Sugandha et al., 2022; X. Fonseca et al., 2019

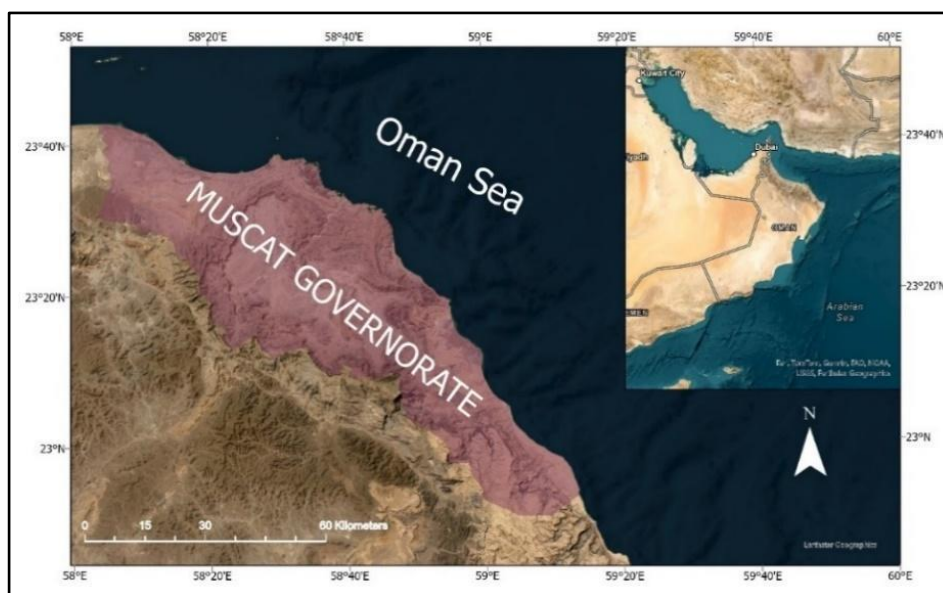
### Study Area

The Muscat Governorate, the principal governorate of Oman located in the northern part of the country, covers a total area of 4,000 km<sup>2</sup> (Fig. 2). Muscat is the most populated governorate in Oman that accounts for 1.5 million of the 4.6 million people living in the country. This governorate has a population density of 325.6 people per km<sup>2</sup> (Amoatey et al., 2020; National Center for Statistics and Information, Sultanate of Oman, 2020).

Muscat's metropolitan area is bordered by the Oman Sea in the north and the Hajar mountain ranges in the south, and the built-up area in this region quadrupled over the past 30 years. Muscat is characterized by its functional division, with industrial districts and substantial residential regions occupying the gap between historic port cities and oasis communities. The new residential neighborhoods have free-standing homes on plots that are often enclosed by high-rising walls. This architectural form is radically antithetical to societal norms and to the traditional Omani culture. This form also results in an extensive utilization of space that may trigger functional segregation and extend travel distances (Scholz & Langer, 2019).

Oman's socioeconomic environment is characterized by a combination of factors, including shifts in its demographics, infrastructure, healthcare, and education systems. This country is home to 2,938,452 million young individuals, which introduce difficulties in controlling Oman's growing urbanization and the

migration of rural population to metropolitan areas (Oman's Ministry of Economy, 2020; The Education Council, 2018).



**Figure 2:** Map showing the location of Muscat.

*Source: Authors, using ArcGIS Pro*

Improvements in living standards and economic growth greatly depend on infrastructure development. The goal of Oman's investments in housing, utilities, telecommunications, and transportation is to promote sustainable growth and regional integration (Al-Hinai et al., 2024). The country's social policies prioritize justice, equality, and social cohesion and focus on welfare programs, such as healthcare, education, and social safety nets for diverse populations. Vision 2040 aims to promote well-being and offer social protection for all residents aside from focusing on social justice, high-quality services, and building social safety nets for future generations (Oman's Ministry of Economy, 2020).

### **Data Collection**

This study applied a qualitative approach to investigate the influence of urban physical factors on social cohesiveness in Muscat. This approach allows for an in-depth examination of individuals' viewpoints, experiences, and meanings attached to social connections and interactions (Kurtenbach, 2024). A total of 12 urban planning experts were interviewed from October to November 2023. These participants were asked 17 questions regarding physical infrastructure factors. The demographic information of these participants are tabulated in Table 1.

**Table 1:** Demographic information of the participants.

Code	Position	Gender	Age	Education background	Professional background (Years)
P1	The Ministry of Transport, Communications, and Information Technology	Female	38	Master	16
P2	The Ministry of Housing and Urban Planning	Female	44	PhD	20
P3	Muscat Municipality	Male	44	Bachelor's	22
P4	Petroleum Development Oman (PDO)	Male	51	PhD	27
P5	The Ministry of Housing and Urban Planning	Male	44	Master	20
P6	PDO	Male	47	Master	23
P7	C3 Advisory	Female	40	Master	18
P8	Muscat Municipality	Male	50	Bachelor's	22
P9	Sultan Qaboos University	Female	38	PhD	17
P10	Muscat Municipality	Male	53	Bachelor's	31
P11	PDO	Male	40	Bachelor's	15
P12	Oman Medical Specialty Board	Male	52	PhD	27

*Source: Data of interview consent form classified and arranged by author*

### Data Analysis

This study performed a thematic analysis based on the simple and conceptually flexible interpretive method of qualitative data analysis that enables the identification and exploration of patterns or themes within a given dataset. NVivo 14 was used for the thematic analysis.

## RESULTS AND DISCUSSION

### Themes Emerging from the Data Analysis

Eight themes related to physical infrastructure factors, namely, 1) land use and connectivity, 2) community and open spaces, 3) activity centers, 4) affordable housing, 5) access to facilities, 6) porous boundaries, 7) health and education infrastructure, and 8) walkable neighborhoods, were identified from the thematic analysis (Table 2).

**Table 2:** Themes related to physical infrastructure factors.

Themes	Files	References
Access to Facilities	12	41
Activity Centers	12	39
Affordable Housing	10	37
Community and Open Spaces	11	46

Themes	Files	References
Health and Education Infrastructure	12	88
Land Use and Connectivity	12	27
Porous Boundaries	11	35
Walkable Neighborhoods	12	52

Source: Author using NVivo 14

### ***Attitudes, Behavior, and Perceptions Toward Health and Education Infrastructure***

The participants highlighted how attitudes, behavior, and perceptions toward health and education infrastructure are influenced by certain factors, such as comparative perspectives, geographic proximity, and service quality. They also reached a consensus on the fundamental importance of health and education as pillars of society that are essential for societal development and productivity. Participant No. 5 said, *“It is considered of fundamental importance and is one of the main foundations in building any society as education and health are always the basic pillars in every society.”* In terms of behavior, proximity to health and education facilities influences behavior, and satisfaction varies according to location. Those individuals who are located closer to facilities tend to exhibit more positive behaviors. Participant No. 3 said, *“It is difficult to judge the behavior of community members. Some people are satisfied because of their proximity to these facilities, and there is another person who is not satisfied because the location of his home is far from those facilities.”* Participant Nos. 6, 7, and 9 highlighted the significant impact of service quality on behavior and perceptions. Satisfaction with high-quality services leads to acceptance and appreciation, while dissatisfaction with low-quality services may result in avoidance or seeking alternatives. Participant No. 9 said, *“If the health service provided is of high quality and I am satisfied with it, I will automatically feel internal satisfaction with this service.”*

Previous studies have emphasized the critical role of health and education infrastructure within city neighborhoods, with a particular focus on accessibility, quality of care, and resource availability (Bramley & Power, 2009; Landorf, 2011; Dempsey et al., 2008; Sugandha et al., 2022).

### ***Impact of Access to Facilities on Social Interaction and Social Cohesion***

Access to facilities in the neighborhood has a considerable influence on social interaction and cohesiveness. Participant Nos. 9 and 12 highlighted the importance of facilities, such as grocery stores, health centers, mosques, and schools, as places where community members can regularly interact and socialize with one another. Participant No. 12 said, *“This means that since we are in one neighborhood, we can meet in the grocery store, in the health center, in the mosque, or in school.”* Nevertheless, Participant No. 2 emphasized that ease of access to facilities significantly impacts social interaction. Having limited access,



such as requiring a car to reach facilities or the lack of pedestrian paths, can hinder people from meeting and interacting with one another. Participant No. 2 shared, *“Of course, it affects me greatly because, for example, if I must use a car to reach these facilities, this means that my opportunity to meet people is limited.”* With regard to the impact of access to facilities on social cohesion, Participant Nos. 3 and 4 noted that having easily accessible facilities within the neighborhood can foster social cohesion by providing opportunities for the community members to meet and interact with one another regularly. Participant No. 3 said, *“It affects your chances of meeting your neighbor or friend on the same path, thus affecting social cohesion.”*

These findings illustrate the significant impact of access to facilities on social interaction and social cohesion within communities, thus echoing the sentiments outlined in the literature (Alipour & Galal Ahmed, 2021; Sugandha et al., 2022).

#### ***Impact of Activity Centers on Social Cohesion and Engagement***

Activity centers help promote social cohesiveness and involvement in communities by offering locations for events, meetings, and activities that bring the community members together.

Participant Nos. 3 and 9 emphasized the role of activity centers in fostering social cohesion through the organization of events and meetings that create opportunities for residents to interact, build familiarity, and strengthen their social bonds. Participant No. 3 said, *“Holding events in these facilities enhances the value of community cohesion by allowing community members to meet and familiarize themselves with one another.”* Other participants highlighted the importance of organizing diverse activities beyond sports to engage community members. Recreation and leisure activities serve as avenues for social interaction and engagement that bring residents together and foster their sense of community. Participant No. 8 said, *“Social cohesion is achieved through activities other than sports, of course, as they bring together a specific group. Recreation brings residents together for interaction.”*

These findings underscore the significance of activity centers in enhancing social cohesion and engagement, thus corroborating the emphasis of previous studies on community involvement and inclusivity (Larimian et al., 2020).

#### ***Influence of initiatives and measures on affordable housing***

Participant Nos. 3 and 9 noted that recent initiatives have increased the number of housing options in the community, thus allowing individuals from various income groups to access affordable housing. Participant No. 3 said, *“It affected the quantity of available housing options.”* While some participants acknowledged these initiatives, they highlighted the need to assess the impact of

these initiatives following their implementation to determine their effectiveness in addressing the issue of affordable housing. Participant No. 2 said, “*We are currently in the implementation phase, but the impact of these initiatives can be measured after the implementation.*” Participant Nos. 6 and 9 anticipated significant positive impacts from these initiatives, including social stability, community satisfaction, increased productivity, and reduced societal burdens.

Previous studies have highlighted the relevance of housing diversity and quantity in fostering social sustainability within cities. For instance, Larimian et al. (2020) emphasized the need to provide a variety of housing alternatives, including inexpensive housing, to promote social inclusion and equity.

### ***Policies and Interventions on Community and Open Spaces***

Community and open space policies and initiatives seek to promote community engagement, improve open space quality, and encourage community connection and cohesiveness. Participant No. 12 argued that community participation is crucial to the success of interventions in open spaces and argued that instilling a sense of importance among residents for these spaces is vital to foster community involvement. This participant shared, “*Community participation is considered very important, but no community participation will arise when the importance of this space is not well understood.*” This statement echoes the emphasis of Sugandha et al. (2022) and Chen et al. (2024) on community engagement. Participant No. 2 highlighted the Vibrant Public Places Initiative, which aims to encourage community involvement in enhancing open spaces. This initiative involves certain activities, such as planting trees and developing parks, and encourages collaboration between government authorities and residents. Participant No. 2 shared, “*The Vibrant Public Places Initiative includes more than one aspect to encourage the community to plant trees... through the Owners Association platform on the Ministry’s website.*” Shirazi and Keivani (2018) argued that government policies on improving pedestrian walkways match the wider goal of boosting community contact and cohesiveness, which leads to the establishment of lively and sustainable landscapes. Government policies also focus on increasing the number of pedestrian paths in urban areas to promote community interaction and cohesion, which aligns with the Ministry of Health’s policy to create a vibrant, sustainable environment. Participant No. said, “*The trend in policies for public facilities is geared toward implementing walking paths in Muscat... The more the number of these facilities increases, the greater the interaction and community cohesion.*”

### ***Integration Between Physical and Social Aspects of Land Use and Connectivity***

A lack of integration is generally observed between physical and social factors in urban planning and land use plans that focus on accommodating an increasing

population instead of addressing social requirements. Some participants expressed their concerns regarding the lack of recreational facilities, social gathering areas, and community amenities in urban development projects. For instance, Participant Nos. 11 and 8 were dissatisfied with the lack of consideration for social aspects in urban planning and land use plans as they solely focused on accommodating the population without addressing recreational facilities and community needs. Participant No. 11 said, “*As for urban planning and land use plans in Muscat, they did not consider the social aspects sufficiently... without considering other aspects and recreational facilities for the community.*” Meanwhile, Participant Nos. 3 and 4 highlighted the lack of integration between physical and social aspects in land use planning and urban development. According to Participant No. 3, “*There is no integration.*” However, Participant No. 9 mentioned some community-driven efforts to create social gathering spaces and meet the diverse social needs within residential neighborhoods, which points to a gap in the formal planning and provision of such spaces. Participant No. 9 said, “*They were not able, in all honesty, even in the Muscat Governorate, to provide services or create a land use law and tool to support various social aspects... the community itself... tries as much as possible to organize these gatherings.*”

The findings from Participant Nos. 3, 4, 8, 9, and 11 on the integration of physical and social aspects of land use and connectivity are consistent with the findings from the literature, particularly related to compactness, service density, and diverse land use configurations (Alipour & Galal Ahmed, 2021; Larimian et al., 2020).

#### ***Physical and Metaphorical Barriers in the Neighborhood***

Participant Nos. 3 and 6 suggest that metaphorical barriers, such as work location and housing affordability, have a greater influence on neighborhood choices compared with physical barriers. However, these barriers may have been significant in the past but are less of a concern now due to improved transportation and communication. Participant No. 6 said, “*The non-physical (metaphorical) barriers are now not a priority for the population... working conditions and proximity have become a priority.*”

Physical barriers (e.g., walls around houses) exist in Muscat, and gated neighborhoods are mainly observed in private or tourist projects for security purposes. Except for these gated communities, most neighborhoods in Muscat are described as open and accessible to everyone, thereby promoting community cohesion. Participant No. 6 said, “*Most of Muscat’s neighborhoods are open and do not have barriers.*”

The openness and accessibility of these neighborhoods help boost community engagement and togetherness. The viewpoints of Participant Nos. 3, 4, and 6 are consistent with the literature (Shirazi & Keivani, 2018; Sugandha et

al., 2022) and emphasize the changing dynamics of urban design. Previous studies have also underscored the importance of social mix and diverse land use configurations for inclusive communities.

### ***Promoting Walkability in Neighborhoods***

Pedestrian paths and walkways improve walkability in neighborhoods, which helps promote community cohesiveness, accessibility, and physical activity. The presence of pedestrian infrastructure naturally encourages inhabitants to stroll, thus promoting a sense of well-being and contributing to community health, which aligns with principles outlined in the literature (Appolloni et al., 2019; D’Orso & Migliore, 2020; Fonseca et al., 2022; Sugandha et al., 2022). Participant Nos. 1 and 11 stressed the importance of pedestrian paths in enhancing community participation, acquaintance, and cohesion. They argued that the availability of these paths naturally encourages residents to use them without the need for legislation. Participant No. 11 said, *“This comes naturally. When you find a walking path, you will go directly to it... Just implement it and you will see the result.”* Pedestrian paths also significantly contribute to accessibility for various groups, including those with special needs and the elderly. They provide a means for walking, cycling, and using strollers or wheelchairs. Participant No. 4 said, *“Yes, it contributes very greatly... whoever has a wheelchair can use it.”* In addition, Participant Nos. 5, 8, and 9 mentioned that pedestrian paths and sidewalks encourage residents to walk spontaneously, thus promoting physical activity and well-being. They serve as a refuge and tool that drives people to walk. Participant No. 8 said, *“These paths and sidewalks contribute to enhancing the residents’ ability to walk... they encourage residents to walk spontaneously.”*

## **CONCLUSION**

Using a qualitative approach, this study explores how urban physical factors foster social cohesion in Muscat. Health and education are widely recognized as societal pillars that are essential for societal development. Certain facilities, such as grocery stores, health centers, mosques, and schools, are important areas where community members can interact and socialize with one another. Activity centers foster social cohesion by holding events that unite different community groups. However, Muscat lacks a variety of these centers, and their distribution across neighborhoods is highly uneven. Nevertheless, some initiatives have been launched to increase the number of housing options, thereby providing additional opportunities for individuals from various income groups to afford housing. Community members are also becoming increasingly aware of the importance of open spaces in bringing them together. Muscat also lacks integration between physical and social factors in its urban planning and land use plans, thus creating a gap in the governorate’s urban planning. Metaphorical barriers, such as work

location and housing affordability, have a greater influence on neighborhood choices compared with physical barriers, and most neighborhoods in Muscat are characterized as open and accessible to everyone, thus promoting community cohesion. Pedestrian paths are undoubtedly critical to enhancing community participation, acquaintance, and cohesion. However, Muscat lacks pedestrian walkways in its neighborhoods. This research contributes insights into social sustainability and social cohesion in Muscat, which have been neglected during its stages of urban planning.

### **ACKNOWLEDGMENT**

This study, which is part of the PhD thesis of the first author, is conducted at Universiti Sains Malaysia under the supervision of the second author with advisory support from the third author and field supervision by the fourth author.

### **REFERENCES**

- Al-Barwani, T. A., & Albeely, T. S. (2013). The Omani family: Strengths and challenges. In *Taylor and Francis Ltd 5* (Vol. 41, Issues 1–2, pp. 119–142). Taylor and Francis. [https://doi.org/10.1300/J002v41n01\\_07](https://doi.org/10.1300/J002v41n01_07)
- Al-Hinai, A. M. Z., Ejohwomu, O., & Abadi, M. (2024). Developing a social value model for Oman's national infrastructure planning: a hermeneutical approach. *Sustainable and Resilient Infrastructure*, 9(2), 192–206. <https://doi.org/10.1080/23789689.2023.2280741>
- Alatas, S. F. (2006). A Khaldunian exemplar for a historical sociology for the south. *Current Sociology*, 54(3). <https://doi.org/10.1177/0011392106063189>
- Alipour, S. M. H., & Galal Ahmed, K. (2021). Assessing the effect of urban form on social sustainability: a proposed 'Integrated Measuring Tools Method' for urban neighborhoods in Dubai. *City, Territory and Architecture*, 8(1), 1–21. <https://doi.org/10.1186/s40410-020-00129-4>
- Amoatey, P., Omidvarborna, H., Baawain, M. S., & Al-Mamun, A. (2020). Evaluation of vehicular pollution levels using line source model for hot spots in Muscat, Oman. *Environmental Science and Pollution Research*, 27(25), 31184–31201. <https://doi.org/10.1007/s11356-020-09215-z>
- Appolloni, L., Corazza, M. V., & D'Alessandro, D. (2019). The pleasure of walking: An innovative methodology to assess appropriate walkable performance in urban areas to support transport planning. *Sustainability (Switzerland)*, 11(12), 3467. <https://doi.org/10.3390/su11123467>
- Bramley, G., & Power, S. (2009). Urban form and social sustainability: The role of density and housing type. *Environment and Planning B: Planning and Design*, 36(1), 30–48. <https://doi.org/10.1068/b33129>
- Castanho Silva, B. (2015). The Politics of Social Cohesion in Germany, France and the United Kingdom. *European Journal of Cultural and Political Sociology*, 2(3–4), 368–371. <https://doi.org/10.1080/23254823.2015.1108855>
- Chen, X., Marzbali, M. H., & Abdullah, A. (2024). Landscape attractiveness and place identity: Considering the role of urban parks. *PLANNING MALAYSIA*, 22.
- Clarke, M., Cadaval, S., Wallace, C., Anderson, E., Egerer, M., Dinkins, L., & Platero,

- R. (2023). Factors that enhance or hinder social cohesion in urban greenspaces: A literature review. In *Urban Forestry and Urban Greening* (Vol. 84, p. 127936). Urban & Fischer. <https://doi.org/10.1016/j.ufug.2023.127936>
- D'Orso, G., & Migliore, M. (2020). A GIS-based method for evaluating the walkability of a pedestrian environment and prioritised investments. *Journal of Transport Geography*, 82, 102555. <https://doi.org/10.1016/j.jtrangeo.2019.102555>
- Dempsey, N., Brown, C., Raman, S., Porta, S., Jenks, M., Jones, C., & Bramley, G. (2008). *Elements of Urban Form* (pp. 21–51). Springer, Dordrecht. [https://doi.org/10.1007/978-1-4020-8647-2\\_2](https://doi.org/10.1007/978-1-4020-8647-2_2)
- Dragolov, G., Ignácz, Z. S., Lorenz, J., Delhey, J., Boehnke, K., & Unzicker, K. (2016). *Theoretical Framework of the Social Cohesion Radar* (pp. 1–13). [https://doi.org/10.1007/978-3-319-32464-7\\_1](https://doi.org/10.1007/978-3-319-32464-7_1)
- Durkheim, É. (1922). De la division du travail social. *F. Alcan*, <https://doi.org/10.4324/9780203786703-2>
- Fonseca, F., Fernandes, E., & Ramos, R. (2022). Walkable Cities: Using the Smart Pedestrian Net Method for Evaluating a Pedestrian Network in Guimarães, Portugal. *Sustainability (Switzerland)*, 14(16), 10306. <https://doi.org/10.3390/su141610306>
- Fonseca, X., Lukosch, S., & Brazier, F. (2019). Social cohesion revisited: a new definition and how to characterize it. *Innovation: The European Journal of Social Science Research*, 32(2), 231–253. <https://doi.org/10.1080/13511610.2018.1497480>
- Hassan, F. (2006). Ibn Khaldun and Jane Addams: The Real Father of Sociology and the Mother of Social Works. *Madrid, November*, 1–23. <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=4b7d142f1538197a07d0654843b3758ec30bd57c>
- Henderson, H., Child, S., Moore, S., Moore, J. B., & Kaczynski, A. T. (2016). The Influence of Neighborhood Aesthetics, Safety, and Social Cohesion on Perceived Stress in Disadvantaged Communities. *American Journal of Community Psychology*, 58(1–2), 80–88. <https://doi.org/10.1002/ajcp.12081>
- Kapoor, K., Weerakkody, V., & Schroeder, A. (2018). Social innovations for social cohesion in Western Europe: success dimensions for lifelong learning and education. *Innovation: The European Journal of Social Science Research*, 31(2), 189–203. <https://doi.org/10.1080/13511610.2017.1419336>
- Kurtenbach, S. (2024). Neighbourhoods and Social Cohesion: Why Neighbourhoods Still Matter. *Built Environment*, 50(1), 73–94. <https://www.ingentaconnect.com/contentone/alex/benv/2024/00000050/00000001/art00007>
- Lalot, F., Abrams, D., Broadwood, J., Davies Hayon, K., & Platts-Dunn, I. (2022). The social cohesion investment: Communities that invested in integration programmes are showing greater social cohesion in the midst of the COVID-19 pandemic. *Journal of Community and Applied Social Psychology*, 32(3), 536–554. <https://doi.org/10.1002/casp.2522>
- Landorf, C. (2011). Evaluating social sustainability in historic urban environments. *International Journal of Heritage Studies*, 17(5), 463–477. <https://doi.org/10.1080/13527258.2011.563788>
- Larimian, T., Freeman, C., Palaiologou, F., & Sadeghi, N. (2020). *Urban social*

- sustainability at the neighbourhood scale: measurement and the impact of physical and personal factors.* 25(10), 747–764. <https://www.tandfonline.com/doi/abs/10.1080/13549839.2020.1829575>
- Mac Fadden, I., Santana, M., Vázquez-Cano, E., & López-Meneses, E. (2021). A science mapping analysis of ‘marginality, stigmatization and social cohesion’ in WoS (1963–2019). *Quality and Quantity*, 55(1), 275–293. <https://doi.org/10.1007/s11135-020-01004-7>
- Moustakas, L. (2022). A Bibliometric Analysis of Research on Social Cohesion from 1994–2020. *Publications*, 10(1). <https://doi.org/10.3390/publications10010005>
- Moustakas, L. (2023). Social Cohesion: Definitions, Causes and Consequences. *Encyclopedia*, 3(3), 1028–1037. <https://doi.org/10.3390/encyclopedia3030075>
- National Center for Statistics and Information. Sultanate of Oman. (2020). *Oman census 2020*. <https://www.ncsi.gov.om/Pages/AllIndicators.aspx>
- Samat, N., Tilaki, M. J. M., & Rahim, A. A. (2024). Assessing the Impact of Inequalities on Residents' perception and Crime Incidents in Urban and Peri-Urban Neighbourhoods. *PLANNING MALAYSIA*, 22(4).
- Oman’s Ministry of Economy. (2020). Oman vision 2040. In *Oman’s Ministry of Economy*. [www.2040.om](http://www.2040.om)
- Schiefer, D., & van der Noll, J. (2017). The Essentials of Social Cohesion: A Literature Review. *Social Indicators Research*, 132(2), 579–603. <https://doi.org/10.1007/s11205-016-1314-5>
- Scholz, W. ;, & Langer, S. (2019). *Spatial Development of Muscat/ Oman and Challenges of Public Transport*. 40–67. <https://doi.org/10.3929/ETHZ-B-000339862>
- Shirazi, M. R., & Keivani, R. (2018). The triad of social sustainability: Defining and measuring social sustainability of urban neighbourhoods. *Https://Doi.Org/10.1080/17535069.2018.1469039*, 12(4), 448–471. <https://doi.org/10.1080/17535069.2018.1469039>
- Sugandha, Freestone, R., & Favaro, P. (2022). The social sustainability of smart cities: A conceptual framework. *City, Culture and Society*, 29, 100460. <https://doi.org/10.1016/j.ccs.2022.100460>
- The education council, S. of O. (2018). *The National Strategy for Education 2040*. <https://www.educouncil.gov.om/downloads/Ts775SPNmXDQ.pdf>

Received: 18<sup>th</sup> March 2024. Accepted: 30<sup>th</sup> August 2024