KMAN PUBLISHING INSTITUTE

Article history:
Received 12 September 2026
Revised 18 October 2026
Accepted 03 October 2026
Initial Publish 28 November 2026
Published online 01 January 2028

Journal of Resource Management and Decision Engineering

Volume 7, Issue 1, pp 1-15




# From Urban Quality of Life to Residential Outcomes: Explaining the Mediating Role of Social Sustainability in Hashtgerd New Town

Nahid. Toozandehjani[1], Mohammadreza. Farzad Behtash[2*], Narges. Nonejad[2], Saeideh. Mohtasham Amiri[2]

[1] PhD Student, Department of Urban Planning, NT.C., Islamic Azad University, Tehran, Iran
[2] Department of Urban Planning, NT.C., Islamic Azad University, Tehran, Iran

*** Corresponding author email address**: farzadbm@iau.ac.ir

A r t i c l e  I n f o

**Article type:**
*Original Research*

**How to cite this article:**
Toozandehjani, N., Farzad Behtash, M., Nonejad, N., & Mohtasham Amiri, S. (2028). From Urban Quality of Life to Residential Outcomes: Explaining the Mediating Role of Social Sustainability in Hashtgerd New Town. *Journal of Resource Management and Decision Engineering*, *7*(1), 1-15.
https://doi.org/10.61838/kman.jrmde.482

© 2028 the authors. Published by KMAN Publication Inc. (KMANPUB). This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

A B S T R A C T

Urban quality of life is a multidimensional concept that encompasses not only the quality of the housing unit but also economic conditions, services, spatial justice, public spaces, and residents' subjective experiences. In new towns, the transformation of these conditions into a sustainable residential experience depends on social capacities and relationships among residents. The present study aimed to explain the relationship between integrated urban quality of life and residential mechanisms and outcomes and to examine the mediating role of social sustainability in Hashtgerd New Town. In terms of purpose, the study was applied, and in terms of approach, it employed an exploratory mixed-methods design with a qualitative-to-quantitative sequence. In the qualitative phase, 20 experts were purposively selected and interviewed using semi-structured interviews. Thematic analysis in MAXQDA resulted in the extraction of 77 basic themes, 35 organizing themes, and five overarching themes. In the quantitative phase, a questionnaire developed on the basis of the qualitative findings was administered to 384 residents, and the model was tested using partial least squares structural equation modeling in SmartPLS. The mean scores for integrated urban quality of life and social sustainability were 2.706 and 2.863, respectively, both below the midpoint of the five-point scale. The results showed that integrated urban quality of life had a positive and significant effect on social sustainability ($\beta = 0.526$, $p < .001$), and social sustainability, in turn, had a positive and significant effect on residential mechanisms and outcomes ($\beta = 0.262$, $p < .001$). The indirect effect of urban quality of life through social sustainability was also significant ($\beta = 0.138$, $p < .001$), and a VAF of 27.2% indicated partial mediation by social sustainability. Therefore, part of the effect of urban quality of life on residential mechanisms and outcomes is transmitted through strengthened trust, cohesion, participation, justice, security, identity, and social belonging, while the direct effect of integrated urban quality of life on residential mechanisms and outcomes also remains in the model.

***Keywords:*** *urban quality of life; social sustainability; residential satisfaction; residential persistence; subjective well-being; social behavior and interaction; Hashtgerd New Town.*

## 1. Introduction

Rapid urbanization, population redistribution, housing pressures, and the expansion of metropolitan regions have intensified scholarly and policy attention to the quality of urban life and the sustainability of residential environments. Contemporary urban development is no longer evaluated solely in terms of the provision of housing units, physical infrastructure, or transportation networks; rather, the success of an urban settlement increasingly depends on the extent to which it provides a satisfactory, equitable, socially cohesive, accessible, and psychologically supportive living environment. Accordingly, urban quality of life has emerged as a multidimensional concept integrating the physical, economic, environmental, social, service-related, and subjective conditions that shape residents' everyday experiences. The conceptual development of quality of life has also demonstrated that a satisfactory life cannot be reduced to material resources alone, because objective living conditions and individuals' subjective evaluations of their lives jointly determine perceived well-being (Veenhoven, 2013). In urban research, this perspective has encouraged a transition from narrowly defined physical indicators toward more comprehensive frameworks that incorporate both measurable urban conditions and residents' perceptions, satisfaction, well-being, and lived experiences (Estoque et al., 2019; Murgaš & Klobučník, 2018).

Urban quality of life therefore represents a complex relationship between people and the environments in which they live. Housing conditions, economic security, access to services, transportation, environmental quality, public spaces, spatial justice, neighborhood characteristics, and social relationships interact to influence residents' assessments of urban life. Research on urban quality of life has shown that neighborhood satisfaction is closely associated with the physical and functional characteristics of the urban environment as well as with residents' perceptions of accessibility, environmental quality, safety, and social conditions (Oktay & Rustemli, 2018). Likewise, assessments conducted in Iranian cities indicate that urban quality of life is affected by a combination of physical, environmental, socioeconomic, service-related, and perceptual factors rather than by a single urban attribute (Ahadnejad Roushti et al., 2020). Consequently, a comprehensive approach to urban quality of life requires the simultaneous examination of objective urban opportunities and constraints and the subjective responses of residents to those conditions.

The significance of urban quality of life becomes particularly evident in newly developed urban settlements. New towns are generally established to absorb population growth, reduce pressure on metropolitan centers, improve access to affordable housing, and create more balanced spatial patterns of development. However, the physical construction of a new settlement does not automatically result in the creation of a socially viable, attractive, and sustainable community. Residents may have access to housing while simultaneously facing deficiencies in transportation, employment, public services, social infrastructure, recreational opportunities, environmental amenities, and neighborhood identity. Studies of Iranian new towns have repeatedly demonstrated that the capacity of these settlements to attract and retain residents depends substantially on the quality of urban life they are able to provide. Research on Sadra New Town, for example, has emphasized the relationship between urban quality of life and population retention, indicating that deficiencies in urban services, employment opportunities, social conditions, and residential satisfaction may weaken residents' willingness to remain in new towns over time (Mahmoudiani & Nazari, 2021).

This issue is especially relevant to Hashtgerd New Town, which has been developed within the broader metropolitan sphere of Tehran and has experienced significant residential expansion. Despite the strategic role assigned to the town in accommodating population growth and responding to housing demand, its development has been accompanied by various functional, spatial, service-related, and social challenges. A problem-oriented assessment of Hashtgerd New Town has demonstrated that urban development challenges in the settlement are interconnected and cannot be addressed effectively through isolated sectoral interventions (Abdi Daneshpour & Badr, 2021). Previous evaluations have also shown that residents' perceived quality of life in Hashtgerd is shaped by multiple dimensions and that subjective assessments provide essential evidence regarding the strengths and weaknesses of the residential environment (Ghasemi & Nouri, 2016). Similarly, research on residential complexes in Hashtgerd has highlighted the importance of qualitative characteristics of housing environments and residential settings in shaping the overall performance and desirability of these developments (Nasiri Avanaki et al., 2020). These findings suggest that the evaluation of Hashtgerd should move beyond housing

provision and address the wider system of conditions through which residential life is experienced.

One of the central dimensions of this wider system is accessibility to urban opportunities. Transportation networks and spatial connectivity affect residents' ability to reach employment, education, healthcare, shopping, recreation, and social destinations and thereby constitute a fundamental dimension of urban quality of life. The efficiency of urban street and transportation networks has direct implications for spatial accessibility and the equitable functioning of metropolitan systems (Ghahremanlou et al., 2024). In new towns, where residents may remain economically or functionally dependent on larger metropolitan centers, weak connectivity can generate substantial time and financial costs, reinforce spatial inequalities, and reduce residential satisfaction. Therefore, mobility and accessibility should be understood not merely as technical transportation variables but as components of the everyday urban experience and as mechanisms through which spatial structure influences social and residential outcomes.

Urban services and public spaces are equally important. Public spaces, urban parks, green areas, neighborhood facilities, and communal environments provide opportunities for recreation, social interaction, psychological restoration, and collective experience. Evidence from Iranian cities shows that urban parks and green spaces can contribute substantially to improving perceived urban quality of life by enhancing environmental quality, leisure opportunities, social interaction, and residents' satisfaction with their surroundings (Shakour et al., 2023). Similarly, the quality of urban spaces has been identified as an important determinant of citizens' quality of life because such spaces mediate the relationship between the physical environment and everyday social experience (Rajabi Amirabad & Rahmani, 2020). These findings are particularly relevant in new towns, where insufficiently developed public realms may limit opportunities for informal interaction and weaken the gradual formation of neighborhood-based social relationships.

The relationship between urban conditions and residents' satisfaction has also been established in broader urban contexts. Studies conducted across urban districts indicate that improvements in urban quality of life are associated with higher citizen satisfaction and more positive evaluations of the urban environment (Kouhi Nasrabadi et al., 2022). In Isfahan, for example, research has identified a set of constituent themes and priorities through which residents evaluate urban quality of life, illustrating that urban well-being reflects a combination of service provision, environmental conditions, socioeconomic opportunities, mobility, safety, and social experience (Zhianpour et al., 2023). Such evidence reinforces the need to conceptualize urban quality of life as an integrated construct rather than as a fragmented set of unrelated indicators.

Nevertheless, favorable physical and service conditions alone may not guarantee successful residential outcomes. The ability of urban environments to generate satisfaction, well-being, social interaction, residential attachment, and long-term residential persistence depends in part on the social processes that emerge within those environments. This introduces the concept of social sustainability as a critical explanatory mechanism linking urban conditions to residents' experiences. Social sustainability broadly concerns the capacity of communities and built environments to maintain social cohesion, inclusion, equity, security, participation, trust, identity, belonging, and supportive social relationships over time. Although definitions vary across disciplines, recent reviews demonstrate that social sustainability consistently includes issues related to social equity, participation, accessibility, community cohesion, well-being, inclusion, and the quality of social relations (Kristoffersen et al., 2024). In residential contexts, these attributes determine whether a settlement functions merely as a collection of housing units or develops into a socially viable community.

Social sustainability is particularly important because the built environment and social processes are mutually influential. Residential design, common spaces, spatial organization, accessibility, and opportunities for encounter can facilitate or constrain interactions among residents. Architectural research on dense housing has therefore emphasized the need for design frameworks that actively support social interaction, community formation, accessibility, and social sustainability rather than treating social outcomes as external to the design process (Janssens & Verbeeck, 2017). Similarly, conceptual investigations of socially sustainable residential neighborhoods have highlighted social cohesion, safety, accessibility, equity, participation, identity, and social interaction as essential attributes of sustainable neighborhood development (Shrivastava, 2019). These perspectives suggest that social sustainability is generated through the interaction between spatial conditions and collective social processes.

Empirical findings in residential environments support this argument. Research on residential complexes in Tehran

has shown that specific social sustainability components can enhance social interaction and improve the social performance of residential environments (Ghafourian et al., 2017). Likewise, studies of behavioral patterns in urban spaces indicate that patterns of space use and opportunities for interpersonal contact are closely related to the social sustainability of urban environments (Ahmadi et al., 2020). Thus, social sustainability provides a conceptual bridge between the qualities of the urban environment and the social behaviors and experiences that arise within it.

From an urban governance perspective, social sustainability is also associated with the quality of relationships between citizens and urban institutions. Participation, responsiveness, institutional trust, equity, and residents' involvement in decision-making influence whether urban development is perceived as legitimate and socially inclusive. Evidence from Isfahan demonstrates that interactions between citizens and urban management constitute an important dimension of social sustainability and that institutional relationships can shape participation, trust, and perceptions of social equity (Ezzatian & Aminzadeh, 2022). More broadly, urban management effectiveness depends on the ability of institutions to coordinate urban resources and respond appropriately to citizens' needs, a concern that has also been emphasized in research on optimal metropolitan management (Ghazanfari, 2024). Therefore, social sustainability is not confined to interpersonal relations within neighborhoods; it also includes the institutional conditions that enable citizens to participate in and trust urban governance processes.

The importance of stakeholders and participatory processes is similarly emphasized in sustainable construction and development literature. Mapping social sustainability attributes across the construction project life cycle has shown that meaningful stakeholder involvement is fundamental to achieving socially sustainable outcomes and that different actors influence social sustainability at different stages of development (Kordi et al., 2021). Residential construction frameworks have also demonstrated that social sustainability should be incorporated into the management of housing projects by considering residents' needs, accessibility, health, safety, participation, social cohesion, and long-term community well-being (Fatourehchi & Zarghami, 2020). These insights are highly relevant to new towns, where planning and construction decisions made during early development stages may have enduring consequences for community formation and residents' subsequent quality of life.

Social sustainability also shares conceptual connections with urban social resilience. Communities characterized by stronger social networks, participation, trust, institutional capacity, and social cohesion may be better equipped to respond to pressures and disturbances. Research on Tehran has demonstrated the multidimensional nature of urban social resilience and highlighted the contribution of social capacities to communities' ability to cope with hazards and environmental pressures (Aliyar, 2025). Although resilience and sustainability are distinct concepts, both emphasize the importance of collective capacities and institutional-social relationships. In the context of new towns, such capacities may be especially important because newly formed communities often lack longstanding social networks, deeply rooted place identities, and established patterns of collective action.

Place identity and sense of belonging are particularly significant in this respect. In newly developed settlements, residents may initially have weak emotional attachments to the place because social relationships, shared memories, and symbolic meanings have not yet developed sufficiently. The physical environment can nevertheless facilitate the formation of belonging when it supports positive experiences, interaction, familiarity, and perceived ownership of space. Empirical research using partial least squares modeling has shown that characteristics of the physical environment can influence individuals' sense of belonging, demonstrating the relevance of spatial flexibility and environmental conditions to psychological attachment (Beyshami & Mousavi, 2025). This relationship is important for understanding why similar housing conditions may lead to different residential outcomes depending on whether residents develop social and emotional connections to their environments.

The consequences of these relationships extend to residential satisfaction, subjective well-being, social interaction, and willingness to remain in a settlement. Residential satisfaction represents residents' cognitive and affective evaluation of their housing and neighborhood conditions, while subjective well-being reflects broader perceptions of life satisfaction and positive experience. Social interaction indicates the extent to which the residential environment facilitates communication, cooperation, and collective participation, whereas residential persistence reflects residents' willingness or intention to continue living in the settlement. These outcomes should not be considered independent of one another. Rather, they emerge through the interaction between physical and

functional urban conditions and the social processes that mediate residents' experience of those conditions.

This integrated perspective helps explain why urban quality of life may have both direct and indirect effects on residential outcomes. Improved services, accessibility, environmental conditions, economic security, public spaces, and housing quality can directly increase satisfaction and well-being. At the same time, these conditions may strengthen opportunities for interaction, trust, participation, security, fairness, place identity, and belonging, which in turn contribute to more favorable residential outcomes. In this sense, social sustainability can function as a mediating mechanism through which improvements in urban quality of life are translated into more stable and positive residential experiences. Such a mechanism is theoretically plausible because socially sustainable environments transform material and spatial resources into relational and psychological benefits.

Despite extensive research on urban quality of life, social sustainability, neighborhood satisfaction, and new-town development, these concepts have often been examined separately. Existing studies have assessed urban quality of life in Iranian neighborhoods (Ahadnejad Roushti et al., 2020), examined quality-of-life priorities in large cities (Zhianpour et al., 2023), analyzed population retention in new towns (Mahmoudiani & Nazari, 2021), evaluated social sustainability in residential and construction environments (Fatourehchi & Zarghami, 2020; Kordi et al., 2021), and explored interaction, participation, and social cohesion within urban settings (Ahmadi et al., 2020; Ghafourian et al., 2017). However, limited attention has been given to an integrated explanatory model in which urban quality of life is conceptualized as a multidimensional antecedent, social sustainability is tested as a mediating mechanism, and residential mechanisms and outcomes are considered as a coherent set of consequences within the specific context of a new town.

This gap is particularly important in Hashtgerd because the town combines issues of housing provision, metropolitan dependence, evolving urban services, emerging public spaces, spatial accessibility, socioeconomic conditions, and the gradual formation of community relationships. The multidimensional problems previously identified in Hashtgerd indicate that improving physical infrastructure alone may be insufficient unless social processes and residents' lived experiences are addressed simultaneously (Abdi Daneshpour & Badr, 2021). Moreover, subjective evaluations of quality of life in Hashtgerd suggest that residents' perceptions should be incorporated directly into any assessment of the town's performance (Ghasemi & Nouri, 2016). An integrated model can therefore provide a more comprehensive explanation of how urban conditions become translated into satisfaction, well-being, social interaction, and residential persistence.

From a methodological perspective, examining such a complex relationship also requires an approach capable of combining contextual exploration with empirical testing. Qualitative inquiry can identify dimensions and indicators grounded in the specific social and spatial context of Hashtgerd, while quantitative structural modeling can evaluate the relationships among the resulting constructs. Partial least squares structural equation modeling is particularly suitable for examining multidimensional latent constructs, simultaneous structural relationships, and mediation mechanisms and has been applied successfully in related social and environmental research contexts (Beyshami & Mousavi, 2025). Such an approach also responds to the broader need for multidimensional and integrative assessment frameworks in quality-of-life research (Estoque et al., 2019).

Accordingly, understanding residential outcomes in Hashtgerd requires moving from a fragmented assessment of housing, services, or social conditions toward a relational framework in which integrated urban quality of life, social sustainability, and residential outcomes are treated as interconnected components of the same urban system. This framework recognizes that the quality of urban life provides the material, spatial, economic, environmental, and perceptual conditions of residence, whereas social sustainability represents the relational and institutional capacity through which these conditions may be transformed into trust, cohesion, participation, justice, security, identity, and belonging. The resulting social processes may then influence whether residents experience satisfaction, psychological well-being, constructive social interaction, and a willingness to remain in the settlement. Such an approach is consistent with contemporary understandings of sustainable urban development, which increasingly emphasize that the long-term success of cities depends not only on physical efficiency but also on the social quality and lived experience of urban environments.

Therefore, the aim of the present study was to explain the relationship between integrated urban quality of life and residential mechanisms and outcomes and to examine the mediating role of social sustainability in Hashtgerd New Town.

## 2. Methods and Materials

The present study was applied in terms of purpose and employed an exploratory mixed-methods approach with a qualitative → quantitative sequence. The logic of the qualitative phase was predominantly inductive, whereas that of the quantitative phase was deductive. The selection of this design was rooted in the nature of the research problem because, prior to testing the relationships among integrated urban quality of life, social sustainability, and residential mechanisms and outcomes, it was necessary to identify and formulate the dimensions, components, and indicators relevant to the context of Hashtgerd New Town from the perspectives of experts. Accordingly, the qualitative phase was used to explore and theorize the model structure, whereas the quantitative phase was employed to measure, validate, and test the structural relationships.

In the qualitative section, data were collected through semi-structured interviews with 20 experts and analyzed using thematic analysis in MAXQDA. The output of this phase consisted of 77 basic themes, 35 organizing themes, and five overarching themes. The indicators derived from thematic analysis were subsequently transformed into items for the quantitative instrument, and the questionnaire was developed on the basis of the qualitative findings.

In the quantitative phase, 384 residents of Hashtgerd New Town were surveyed, and the data were analyzed using partial least squares structural equation modeling (PLS-SEM) in SmartPLS (Beyshami & Mousavi, 2025). During this phase, the measurement model, structural model, and mediation effects were evaluated. Therefore, the linkage between the two phases was not limited merely to the simultaneous use of two methodological approaches; rather, the findings of the qualitative phase directly served as input for the quantitative phase and constituted the basis for instrument development and formulation of the model to be tested.

The participant population in the qualitative phase consisted of experts and specialists relevant to the research topic. The inclusion criteria were possession of a master's or doctoral degree and academic, research, or executive experience related to architecture and urban design, urban and regional planning, urban management, housing policy, transportation, economics, or urban sociology. Purposive sampling was employed, with attention given to diversity in expertise and professional experience. A total of 20 individuals participated in the qualitative phase, including 12 men and eight women; 16 held doctoral degrees and four held master's degrees.

The interviews were semi-structured and included questions concerning the definition and dimensions of urban quality of life, quality-of-life issues in Hashtgerd, physical and spatial characteristics, the definition and indicators of social sustainability, factors that strengthen or weaken social sustainability, pathways through which quality of life affects social sustainability and residential outcomes, and requirements for an optimal model. Following transcription, the interviews were coded through thematic analysis using MAXQDA 2020. The process began with familiarization with the data and extraction of initial codes and continued with the development of basic, organizing, and overarching themes.

The qualitative sample size was not predetermined definitively, and data collection continued until saturation was achieved. According to the research findings, no new code, component, or dimension was added to the pattern in the final interviews, particularly in the twentieth interview. Therefore, saturation was achieved at the levels of codes, components, and dimensions. The output of this phase consisted of 77 basic themes, 35 organizing themes, and five overarching themes, which served as the basis for instrument development and model formulation in the quantitative phase.

The quantitative phase was conducted as a cross-sectional survey among residents of Hashtgerd New Town. Given that the population proportion was unknown, the values $p = q = 0.50$, $z = 1.96$, and a 5% margin of error were considered in determining the sample size, resulting in a required sample of 384 participants. To ensure coverage of different residential areas, questionnaires were distributed across all seven phases of the town.

**Table 1**

*Distribution of the Quantitative Sample Across Residential Phases of Hashtgerd New Town*

| Residential Phase | Frequency | Percentage |
|---|---|---|
| 1 | 62 | 16.1 |
| 2 | 52 | 13.5 |
| 3 | 55 | 14.3 |

| | | |
|---|---|---|
| 4 | 71 | 18.5 |
| 5 | 53 | 13.8 |
| 6 | 49 | 12.8 |
| 7 | 42 | 10.9 |
| Total | 384 | 100.0 |

Data were collected through both library-based and field-based methods. In the qualitative phase, the primary data collection instrument was the semi-structured expert interview, conducted to identify the factors, components, and indicators affecting urban quality of life from a social sustainability perspective in Hashtgerd New Town. The interview data were analyzed using thematic analysis, through which themes and indicators relevant to the research topic were extracted.

In the quantitative phase, a five-point Likert-scale questionnaire was used to collect the views of residents of Hashtgerd New Town. The questionnaire items were developed on the basis of indicators extracted from the qualitative phase and in accordance with the theoretical framework of the study. Thus, the quantitative instrument was derived directly from the findings of the exploratory phase. The questionnaire comprised items related to three main constructs: "integrated urban quality of life," "social sustainability," and "residential mechanisms and outcomes." The resulting data were used to evaluate the measurement model, test structural relationships, and examine the mediating role of social sustainability within the structural equation modeling framework.

In the qualitative phase, the data were classified and structured using thematic analysis. In the quantitative phase, data analysis was conducted using partial least squares structural equation modeling in SmartPLS. In accordance with the methodological procedure of the study, the measurement models were evaluated first, followed by the structural model. Measurement model assessment included indicator reliability, internal consistency, composite reliability, convergent validity, and discriminant validity. Average variance extracted (AVE) was used to assess convergent validity, while the Fornell–Larcker criterion and the heterotrait–monotrait ratio (HTMT) were employed to evaluate discriminant validity.

The measurement assessment results showed that Cronbach's alpha values ranged from 0.753 to 0.952, composite reliability values ranged from 0.859 to 0.956, and AVE values ranged from 0.508 to 0.749. The maximum HTMT value was 0.854, which was below 0.90. Together with the assessment of factor loadings and other validity evidence, these results confirmed the adequacy of the measurement model.

At the structural model stage, the magnitude and significance of the path coefficients were evaluated using t statistics and p values, while the explanatory power of the endogenous constructs was assessed using $R^2$ and the model's predictive relevance was examined using $Q^2$. In addition, SRMR and NFI were reported as supplementary model fit indices. Mediation analysis was conducted to examine the role of social sustainability in the relationship between integrated urban quality of life and residential mechanisms and outcomes. Accordingly, in addition to the direct effect, the indirect effect through social sustainability was assessed, and the variance accounted for (VAF) ratio was calculated to determine the extent of mediation. This analytical logic corresponded directly to the core structure of the research model: "urban quality of life → social sustainability → residential mechanisms and outcomes."

## 3. Findings and Results

Thematic analysis showed that quality of life in Hashtgerd New Town has a multidimensional nature encompassing residential, economic, service-related, spatial, environmental, and perceptual conditions. At the social level, trust, cohesion, participation, inclusion, security, justice, identity, and belonging emerged as the principal components. At the level of residential outcomes, residential satisfaction, subjective well-being, social behavior and interaction, and residential persistence were identified. This structure indicates that quality of life, social sustainability, and residential outcomes are interconnected within a conceptual chain.

The qualitative findings regarding residential satisfaction showed that satisfaction with the housing unit alone is insufficient and that deficiencies in surrounding services and facilities can reduce residential satisfaction. Overall satisfaction is formed when housing, services, neighborhood environment, mobility, and social relations collectively provide acceptable living conditions. Moreover, positive residential experiences and interactions with neighbors can strengthen emotional attachment to place.

With respect to social interaction, everyday presence in public spaces increases opportunities for meeting and communicating with neighbors, while collective activities can strengthen social participation. Therefore, within the conceptual model, the quality of public spaces can be interpreted not merely as a component of environmental quality but also as one of the contexts facilitating the development of the social outcomes of residence.

**Table 2**

*Descriptive Statistics of the Key Research Constructs*

| Construct | Mean | Standard Deviation | Interpretation |
|---|---|---|---|
| Integrated urban quality of life | 2.706 | 0.808 | Below the midpoint |
| Social sustainability | 2.863 | 0.778 | Below the midpoint |
| Residential satisfaction | 3.149 | 1.045 | Slightly above the midpoint |
| Subjective well-being | 2.949 | 1.059 | Slightly below the midpoint |
| Social behavior and interaction | 2.851 | 1.080 | Below the midpoint |
| Residential persistence | 3.100 | 1.068 | Slightly above the midpoint |

Given the use of a five-point scale, a value of 3 was considered the midpoint. Accordingly, integrated urban quality of life, with a mean of 2.706, was below the midpoint, while social sustainability, with a mean of 2.863, was at a moderately low level. Residential satisfaction and residential persistence, with means of 3.149 and 3.100, respectively, were only slightly above the midpoint.

**Table 3**

*Descriptive Statistics of the Components of Urban Quality of Life, Social Sustainability, and Residential Outcomes*

| Overarching Construct | Component | Mean | Standard Deviation |
|---|---|---|---|
| Urban quality of life | Residential quality and stability | 3.000 | 1.028 |
| Urban quality of life | Economic well-being and security | 2.451 | 0.979 |
| Urban quality of life | Equitable access to urban services | 2.749 | 1.016 |
| Urban quality of life | Service and spatial justice | 2.450 | 0.992 |
| Urban quality of life | Mobility and spatial connectivity | 2.749 | 1.033 |
| Urban quality of life | Local accessibility | 2.601 | 1.006 |
| Urban quality of life | Environmental quality | 3.050 | 1.067 |
| Urban quality of life | Perceptual and aesthetic quality | 2.750 | 1.026 |
| Urban quality of life | Quality of public spaces | 2.550 | 0.971 |
| Social sustainability | Trust and social capital | 3.049 | 1.055 |
| Social sustainability | Social cohesion and social ties | 3.100 | 1.038 |
| Social sustainability | Civic participation and engagement | 2.651 | 1.008 |
| Social sustainability | Social inclusion and equality | 2.750 | 1.049 |
| Social and perceived security | Social and perceived security | 2.852 | 0.997 |
| Social sustainability | Social and institutional justice | 2.550 | 1.010 |
| Social sustainability | Place identity | 2.899 | 1.043 |
| Social sustainability | Sense of place attachment | 3.050 | 1.051 |
| Residential outcomes | Residential satisfaction | 3.149 | 1.045 |
| Residential outcomes | Subjective well-being | 2.949 | 1.059 |
| Residential outcomes | Social behavior and interaction | 2.851 | 1.080 |
| Residential outcomes | Residential persistence | 3.100 | 1.068 |

Among the urban quality-of-life components, environmental quality, with a mean of 3.050, received the highest evaluation, whereas service and spatial justice, with a mean of 2.450, and economic well-being and security, with a mean of 2.451, received the lowest evaluations. Residential quality and stability, with a mean of 3.000, were positioned close to the midpoint. Within social sustainability, social cohesion and social ties, with a mean of 3.100, sense of place attachment, with a mean of 3.050, and trust and social capital, with a mean of 3.049, showed relatively higher levels. In contrast, social and institutional justice, with a mean of 2.550, and civic participation and engagement, with a mean of 2.651, showed the lowest values.

The results of the measurement model assessment indicated that the factor loadings of the items were within acceptable ranges. Cronbach's alpha coefficients for the constructs ranged from 0.753 to 0.952, while composite reliability coefficients ranged from 0.859 to 0.956. AVE values ranged from 0.508 to 0.749, indicating that the constructs explained at least half of the variance in their respective indicators. The Fornell–Larcker criterion and the HTMT ratio also supported discriminant validity, with the highest HTMT value being 0.854, which was below the threshold of 0.90.

In the full structural model, the $R^2$ values for integrated urban quality of life, social sustainability, and residential mechanisms and outcomes were 0.570, 0.537, and 0.722, respectively. In this estimation, structural barriers in Hashtgerd New Town and strategies for improving quality of life and social sustainability were retained as contextual/explanatory factors alongside the three principal constructs. Consequently, integrated urban quality of life was also treated as an endogenous construct in the full model. The corresponding $Q^2$ values were 0.250, 0.208, and 0.293, respectively, and their positive values supported the predictive relevance of the model. The SRMR value was 0.070, and the NFI value was 0.917.

**Table 4**

*Results of Testing the Main Structural Paths and Research Hypotheses*

| Hypothesis | Path | β | t | p | Result |
|---|---|---|---|---|---|
| H1 | Urban quality of life → Social sustainability | 0.526 | 10.055 | < .001 | Supported |
| H2 | Social sustainability → Residential outcomes | 0.262 | 5.982 | < .001 | Supported |
| H3 | Urban quality of life → Social sustainability → Residential outcomes | 0.138 | 4.972 | < .001 | Partial mediation |

The results showed that integrated urban quality of life had a positive and significant effect on social sustainability. The path coefficient was 0.526, the t statistic was 10.055, and the significance level was below .001; therefore, the first hypothesis was supported. Social sustainability also had a positive and significant effect on residential mechanisms and outcomes, with a coefficient of 0.262 and a t statistic of 5.982; therefore, the second hypothesis was supported.

**Table 5**

*Results of the Indirect Effect and Mediation Test for Social Sustainability*

| Indicator | Value |
|---|---|
| Direct effect of quality of life on residential outcomes | 0.370 |
| Indirect effect through social sustainability | 0.138 |
| t statistic for the indirect effect | 4.972 |
| Significance level of the indirect effect | < .001 |
| Total effect (calculated) | 0.508 |
| VAF | 27.2% |

To examine the third hypothesis, the indirect effect of integrated urban quality of life on residential mechanisms and outcomes through social sustainability was assessed. The indirect effect was 0.138, with a t statistic of 4.972, and was significant at $p < .001$. The direct effect of integrated urban quality of life on residential mechanisms and outcomes was also reported as 0.370.

The indirect effect of urban quality of life on residential mechanisms and outcomes through social sustainability was significant ($\beta = 0.138$, $t = 4.972$, $p < .001$). The direct effect of integrated urban quality of life on residential mechanisms and outcomes was reported as $\beta = 0.370$; however, the t statistic and p value for this path were not available in the reported data, and therefore no new value should be estimated or claimed for this relationship. Given the significance of the indirect effect, the retention of the direct effect, and a VAF value of 27.2%, the mediating role of social sustainability was reported as partial mediation. The total effect, calculated as the sum of the direct and indirect effects, was 0.508.

## 4. Discussion and Conclusion

The present study examined the relationship between integrated urban quality of life, social sustainability, and

residential mechanisms and outcomes in Hashtgerd New Town, with particular emphasis on the mediating role of social sustainability. The findings indicated that the overall level of integrated urban quality of life was below the midpoint of the five-point scale, with a mean of 2.706, while social sustainability also remained below the midpoint, with a mean of 2.863. Among the residential outcomes, residential satisfaction and residential persistence were only slightly above the midpoint, whereas subjective well-being and social behavior and interaction remained slightly below it. At the component level, environmental quality received the highest evaluation among the dimensions of urban quality of life, whereas service and spatial justice and economic well-being and security received the lowest scores. Within social sustainability, social cohesion and social ties, sense of place attachment, and trust and social capital were relatively stronger, while social and institutional justice and civic participation and engagement were the weakest dimensions. These findings suggest that residents' evaluations of Hashtgerd New Town are characterized by a relatively uneven pattern in which some environmental and relational attributes are moderately favorable, whereas economic, distributive, participatory, and institutional dimensions remain comparatively weak.

The relatively low overall level of urban quality of life is consistent with the multidimensional nature of quality-of-life assessment emphasized in previous research. Urban quality of life cannot be adequately explained through housing conditions alone because residents evaluate their living environment through a combination of accessibility, service provision, environmental conditions, safety, economic opportunities, mobility, public spaces, and subjective perceptions (Estoque et al., 2019; Murgaš & Klobučník, 2018; Veenhoven, 2013). The present results reinforce this perspective by showing that some dimensions of life in Hashtgerd, such as environmental quality, received relatively acceptable evaluations, while other dimensions, particularly economic security and spatial-service justice, remained weak. Similar evidence from Iranian urban contexts has shown that quality of life is strongly shaped by the interaction of socioeconomic, physical, service-related, and environmental variables rather than by a single urban feature (Ahadnejad Roushti et al., 2020). The findings are also consistent with studies emphasizing that resident satisfaction depends on the overall balance of neighborhood and urban conditions, not merely on the quality of housing units themselves (Oktay & Rustemli, 2018).

The low evaluation of service and spatial justice is particularly important in the context of a new town. In such settlements, unequal access to services, weak connectivity, and uneven spatial distribution of facilities can directly affect residents' everyday experience and may reinforce dissatisfaction even when housing provision is quantitatively adequate. Previous research in Hashtgerd has already identified interconnected urban problems and emphasized that deficiencies in service provision, accessibility, and urban functioning cannot be solved through isolated interventions (Abdi Daneshpour & Badr, 2021). Similarly, assessments of residential quality in Hashtgerd have shown that the qualitative performance of residential environments is shaped not only by the physical condition of housing but also by the surrounding urban context (Nasiri Avanaki et al., 2020). The present findings therefore extend earlier evidence by suggesting that the perceived inadequacy of urban quality of life may be strongly associated with uneven access to services, economic insecurity, and limited local accessibility.

The role of mobility and spatial connectivity should also be considered in interpreting these results. Hashtgerd New Town remains functionally linked to the wider metropolitan region, and weaknesses in transportation and access can increase residents' daily costs in terms of time, money, and effort. Research on urban transportation systems has shown that the structure and efficiency of street and transport networks influence accessibility and the broader functioning of urban areas (Ghahremanlou et al., 2024). In the present study, mobility and spatial connectivity and local accessibility both received mean scores below the midpoint, indicating that transportation and access remain relevant challenges. These findings suggest that residents' quality of life is likely affected not only by what is available within the settlement but also by the ease with which people can reach employment, education, services, and social opportunities.

The finding that environmental quality was among the strongest dimensions of urban quality of life is also noteworthy. Green environments, open spaces, and acceptable environmental conditions can contribute positively to residents' perceptions of urban life even when other urban functions remain underdeveloped. This result is in line with evidence indicating that parks and green spaces contribute to urban quality of life by supporting recreation, psychological restoration, environmental comfort, and social interaction (Shakour et al., 2023). Likewise, urban spaces can enhance quality of life when they provide usable, accessible, and socially meaningful environments (Rajabi

Amirabad & Rahmani, 2020). However, the relatively low score for the quality of public spaces in the current study suggests that environmental quality and public-space quality are not necessarily identical. A settlement may possess acceptable environmental attributes while still lacking sufficiently attractive, socially active, and inclusive public spaces.

The findings regarding social sustainability reveal a similarly differentiated pattern. Social cohesion and social ties, place attachment, and trust and social capital were relatively stronger than civic participation, social justice, and institutional justice. This suggests that informal social relations may have developed to a greater extent than formal participatory or institutional dimensions. Such a pattern is theoretically plausible in new residential communities, where everyday interactions among neighbors may emerge gradually even when residents have limited influence over urban management or perceive inequalities in institutional responsiveness. Social sustainability research has consistently identified cohesion, participation, equity, trust, belonging, and inclusion as core dimensions of socially sustainable communities (Kristoffersen et al., 2024; Shrivastava, 2019). The present findings confirm the importance of these dimensions but also show that they do not necessarily develop at the same rate.

The relatively favorable score for social cohesion and social ties is consistent with studies showing that residential environments can support interaction when their spatial and social characteristics provide opportunities for repeated encounters and collective activity. Research in residential complexes has shown that social sustainability can be strengthened through environmental conditions that facilitate interaction and neighborhood relationships (Ghafourian et al., 2017). Similarly, patterns of urban space use have been linked to social sustainability because the organization and use of space can either promote or restrict communication among users (Ahmadi et al., 2020). The qualitative findings of the present study also supported this interpretation by showing that public spaces and routine presence in shared environments create opportunities for meeting, conversation, and community participation.

In contrast, the low scores for civic participation and social and institutional justice indicate important governance-related weaknesses. Social sustainability does not depend solely on interpersonal relations; it also requires institutional responsiveness, perceived fairness, and opportunities for meaningful participation. Research conducted in Isfahan has demonstrated that the relationship between citizens and urban management is a major component of social sustainability and that participation, trust, and institutional interaction are central to socially sustainable urban development (Ezzatian & Aminzadeh, 2022). The present findings are compatible with this evidence and indicate that Hashtgerd may face a gap between informal social cohesion and formal civic engagement. This interpretation is also consistent with research emphasizing the importance of effective urban governance and coordinated management in improving the performance of metropolitan and urban systems (Ghazanfari, 2024).

The first structural finding showed that integrated urban quality of life had a positive and significant effect on social sustainability, with a path coefficient of $\beta = 0.526$. This indicates that improvements in the quality of the urban environment are associated with stronger social trust, cohesion, participation, security, justice, identity, and belonging. This result supports the theoretical assumption that the physical and functional quality of urban environments creates conditions within which social relationships can develop. High-quality services, accessible public spaces, better mobility, economic security, and environmental quality can increase opportunities for interaction, reduce daily stress, strengthen perceptions of fairness, and enhance identification with place. In contrast, inadequate services, spatial inequality, and weak accessibility may undermine trust and belonging.

This relationship is supported by studies emphasizing the connection between residential and built environments and social sustainability. Architectural and housing research has shown that spatial design can facilitate social interaction, accessibility, and community formation (Janssens & Verbeeck, 2017). Studies of residential sustainability have likewise identified the built environment as a significant determinant of social cohesion, safety, inclusion, and participation (Fatourehchi & Zarghami, 2020). The present study extends this evidence by demonstrating that the influence is not limited to the design of individual housing projects but operates at the broader level of integrated urban quality of life.

The positive relationship between quality of life and social sustainability is also consistent with findings indicating that urban quality of life contributes to citizen satisfaction and positive perceptions of the city (Kouhi Nasrabadi et al., 2022). In addition, studies in Isfahan have shown that residents' quality-of-life evaluations depend on interconnected physical, service, environmental, and social

dimensions (Zhianpour et al., 2023). From this perspective, the effect observed in the present study suggests that better urban living conditions may generate more favorable social experiences by increasing residents' confidence in their environment and strengthening attachment to the community.

The second major finding showed that social sustainability had a positive and significant effect on residential mechanisms and outcomes, with a path coefficient of $\beta = 0.262$. This indicates that stronger social sustainability is associated with higher residential satisfaction, greater subjective well-being, stronger social interaction, and greater residential persistence. This finding is important because it demonstrates that the social qualities of a settlement are not secondary outcomes but active determinants of the residential experience. Residents are more likely to evaluate their environment positively when they feel safe, included, connected to others, treated fairly, and emotionally attached to the place.

This result is consistent with research highlighting the importance of social sustainability for the functioning of residential neighborhoods. Socially sustainable neighborhoods are characterized by social cohesion, accessibility, security, inclusion, participation, and identity, all of which can enhance residents' quality of life and willingness to remain in a community (Shrivastava, 2019). Similar findings have been reported in residential complex studies, where social interaction and neighborhood relationships were identified as key outcomes of socially sustainable environments (Ghafourian et al., 2017). The positive association with residential persistence is also aligned with research on Iranian new towns, which has shown that population retention is closely related to residents' evaluation of quality of life and local conditions (Mahmoudiani & Nazari, 2021).

The role of place attachment is especially relevant to this relationship. The present study showed that sense of place attachment was among the relatively stronger components of social sustainability, suggesting that emotional bonds with the residential environment may already be emerging among some residents. Previous research has demonstrated that the qualities of the physical environment can influence sense of belonging and psychological attachment (Beyshami & Mousavi, 2025). In the context of Hashtgerd, such attachment may help explain why residential persistence remained slightly above the midpoint despite relatively weak overall quality-of-life scores. Residents may remain in the settlement not only because of material considerations but also because of accumulated social relationships and emotional connections to place.

The mediation analysis represents one of the central contributions of the study. The indirect effect of integrated urban quality of life on residential mechanisms and outcomes through social sustainability was positive and significant, with $\beta = 0.138$, while the VAF value of 27.2% indicated partial mediation. This means that urban quality of life affects residential outcomes through two complementary pathways. First, it exerts a direct effect on satisfaction, well-being, interaction, and residential persistence. Second, part of its effect is transmitted through social sustainability by strengthening trust, cohesion, participation, justice, security, identity, and belonging. The persistence of the direct effect indicates that social sustainability does not fully explain the relationship, but it constitutes a meaningful mechanism through which urban conditions are converted into residential experiences.

This finding is theoretically consistent with multidimensional quality-of-life models that distinguish between objective living conditions and subjective or relational experiences (Estoque et al., 2019; Veenhoven, 2013). Urban conditions such as accessibility, services, housing quality, and environmental quality can directly influence satisfaction, while also shaping the social context through which residents interpret and experience their environment. The partial mediation result therefore provides empirical support for a layered interpretation of residential outcomes. Material and spatial conditions matter in their own right, but their effects are amplified when they facilitate socially sustainable relationships and stronger place attachment.

The mediation finding is also compatible with stakeholder-oriented approaches to social sustainability. Research in construction and urban development has shown that stakeholder involvement, participation, and responsiveness are necessary for socially sustainable outcomes across the development process (Kordi et al., 2021). From this perspective, the social consequences of urban quality cannot be produced solely through infrastructure investment. They also require governance mechanisms that involve residents, build trust, and respond to community needs. The relatively low civic participation score found in the present study suggests that this pathway remains underdeveloped in Hashtgerd.

The findings also have implications for the relationship between social sustainability and social resilience. Stronger networks, trust, participation, and institutional capacity can

enhance the ability of communities to cope with external pressures and uncertainty. Research on urban social resilience has shown that social capacities are central to collective adaptation and urban resilience (Aliyar, 2025). Although resilience was not directly tested in the present study, the results suggest that improvements in social sustainability may generate broader benefits beyond residential satisfaction by strengthening the collective capacity of the community.

Overall, the structural model demonstrated substantial explanatory power, with $R^2$ values of 0.537 for social sustainability and 0.722 for residential mechanisms and outcomes. These values indicate that the model accounts for a meaningful proportion of variance in the endogenous constructs and supports the conceptual framework developed from the qualitative phase. Positive $Q^2$ values further indicated predictive relevance, while the SRMR of 0.070 and NFI of 0.917 provided additional support for model adequacy. These results reinforce the argument that an integrated framework combining urban quality of life and social sustainability provides a more comprehensive explanation of residential outcomes than approaches that treat these domains separately.

The present study has several limitations that should be considered when interpreting the findings. First, the quantitative phase employed a cross-sectional design, which limits the ability to establish temporal or causal relationships with complete certainty. Second, the data were based on residents' self-reported perceptions and may therefore be influenced by individual expectations, current mood, personal circumstances, or response bias. Third, the study was conducted in one new town, and the specific spatial, socioeconomic, demographic, and institutional characteristics of Hashtgerd may limit the generalizability of the results to other new towns or established urban areas. Fourth, although the qualitative phase achieved thematic saturation and provided a context-specific basis for instrument development, the number and disciplinary composition of experts may have influenced the themes that emerged. Finally, the direct effect of integrated urban quality of life on residential mechanisms and outcomes was available in the reported model, but the corresponding t statistic and p value were not available, which limited the possibility of providing a more detailed inferential interpretation of that path.

Future studies should employ longitudinal designs to examine how changes in urban quality of life and social sustainability affect residential outcomes over time and to determine whether improvements in services, accessibility, public spaces, or governance produce sustained effects. Comparative studies across multiple new towns would also help identify which findings are context-specific and which represent more general patterns of new-town development. Future research could incorporate multilevel modeling to distinguish individual-level perceptions from neighborhood- or phase-level characteristics and could combine subjective indicators with objective spatial measures such as service accessibility, travel time, land-use diversity, green-space availability, and facility distribution. Additional mediators and moderators, including place attachment, social capital, perceived safety, socioeconomic status, length of residence, homeownership, age, and commuting dependence, could also be examined to provide a more detailed explanation of residential outcomes. Finally, future studies could test the model in other cultural and institutional contexts and compare covariance-based and variance-based structural equation approaches to assess the robustness of the structural relationships.

Urban managers and planners in Hashtgerd should prioritize interventions that simultaneously improve material urban conditions and strengthen social relations. Particular attention should be directed toward improving service and spatial justice, local accessibility, economic opportunities, and the quality of public spaces, because these dimensions received comparatively weak evaluations. Public spaces should be designed and managed as social infrastructure capable of supporting everyday interaction, community activities, and informal encounters. Urban management should also create more effective channels for citizen participation, neighborhood consultation, and transparent communication in order to strengthen trust and institutional legitimacy. Programs that support local associations, community events, neighborhood initiatives, and participatory decision-making can help reinforce social cohesion and place attachment. Improving transportation connectivity, ensuring equitable access to essential services, and increasing the responsiveness of local institutions should be treated as complementary strategies rather than isolated interventions. Because social sustainability partially mediates the effect of urban quality of life on residential outcomes, urban development policies should not focus exclusively on physical investment but should also deliberately strengthen trust, participation, inclusion, security, identity, and belonging so that improvements in the urban environment are translated into greater satisfaction, well-being, social interaction, and residential persistence.

## Authors' Contributions

Authors contributed equally to this article.

## Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

## Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

## Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

## Declaration of Interest

The authors report no conflict of interest.

## Funding

According to the authors, this article has no financial support.

## Ethics Considerations

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were considered.

## References

Abdi Daneshpour, Z., & Badr, S. (2021). A problem-tracking framework for new towns: Problem-oriented planning in Hashtgerd New Town. *Architecture and Urban Planning*, *10*(20), 5-22.

Ahadnejad Roushti, M., Najafi, S., & Mohammadi Torkamani, H. (2020). Factors affecting urban quality of life: The Islam Abad and Karmandan neighborhoods of Zanjan. *Human Settlements Planning Studies*, *15*(1), 185-198.

Ahmadi, H., Haghbayan, R., & Nabizadeh Zoulpirani, M. (2020). Behavioral patterns of urban space users and environmental social sustainability: The commercial corridor of Saghari Sazan, Rasht. *Human Settlements Planning Studies*, *15*(2), 454-560.

Aliyar, F. (2025). Assessing urban social resilience to natural hazards and the contribution of its dimensions: The case of Tehran, Iran. *Transactions on Data Analysis in Social Science*, *7*(3), 183-196. https://doi.org/10.22034/tdas.2025.255651

Beyshami, M., & Mousavi, S. M. (2025). Examining the impact of flexible partitions in educational spaces on the sense of belonging of high school female students: A partial least squares approach. *Transactions on Data Analysis in Social Science*, *7*(1), 54-69. https://doi.org/10.22034/tdas.2025.228301

Estoque, R. C., Togawa, T., Ooba, M., Gomi, K., Nakamura, S., Hijioka, Y., & Kameyama, Y. (2019). A review of quality of life (QOL) assessments and indicators: Towards a QOL-climate assessment framework. *Ambio*, *48*, 619-638. https://doi.org/10.1007/s13280-018-1090-3

Ezzatian, S., & Aminzadeh, B. (2022). Social sustainability in the interaction between citizens and urban management using factor analysis: Isfahan. *Geography and Urban Space Development*, *9*(4), 39-54.

Fatourehchi, D., & Zarghami, E. (2020). Social sustainability assessment framework for managing sustainable construction in residential buildings. *Journal of Building Engineering*, *32*, 101123. https://doi.org/10.1016/j.jobe.2020.101761

Ghafourian, M., Afshinmehr, V., & Norouzizadeh, Z. (2017). Social sustainability components that enhance social interactions in residential complexes: Abazar neighborhood, Tehran. *City Identity*, *11*(30).

Ghahremanlou, A., Saffarzadeh, M., Naderan, A., & Javanshir, H. (2024). Demographic and efficiency analysis of street transportation network in districts of Tehran metropolitan. *Transactions on Machine Intelligence*, *7*(1), 70-81. https://doi.org/10.47176/TMI.2024.70

Ghasemi, K., & Nouri, Z. (2016). Assessing quality of life in new towns using subjective quality measurement: Hashtgerd New Town. *7*(25), 159-172.

Ghazanfari, M. (2024). The possibility of implementing the optimal management of Shiraz metropolis according to Friedman's hypothesis test. *Transactions on Data Analysis in Social Science*, *6*(4), 255-267. https://doi.org/10.47176/TDASS.2024.255

Janssens, B., & Verbeeck, G. (2017). Towards a framework for architectural design enhancing social sustainability in dense housing projects. European Network for Housing Research (ENHR),

Kordi, N. E., Belayutham, S., & Che Ibrahim, K. I. (2021). Mapping of social sustainability attributes to stakeholders' involvement in construction project life cycle. *Construction Management and Economics*, *39*, 513-532. https://doi.org/10.1080/01446193.2021.1923767

Kouhi Nasrabadi, M., Vahedian, M., & Mokhtarian, B. (2022). The role of urban quality of life in citizen satisfaction across the fifteen districts of Isfahan. *Urban Management*(61), 139-151.

Kristoffersen, A. E., Schultz, C. P. L., & Kamari, A. (2024). A critical comparison of concepts and approaches to social sustainability in the construction industry. *Journal of Building Engineering*, *91*, 109530. https://doi.org/10.1016/j.jobe.2024.109530

Mahmoudiani, S., & Nazari, M. (2021). Population retention in new towns with emphasis on urban quality of life: Sadra New Town. *Social Problems of Iran*, *12*(2), 119-141.

Murgaš, F., & Klobučník, M. (2018). Quality of life in the city, quality of urban life or well-being in the city: Conceptualization and case study. *Ekológia (Bratislava)*, *37*(2), 183-200. https://doi.org/10.2478/eko-2018-0016

Nasiri Avanaki, G., Afshar, M., & Ahmadi, A. (2020). Evaluating the quality characteristics of residential complexes: Valiasr complex in Hashtgerd. First International Conference on Architecture, Civil Engineering, Environment and Agriculture,

Oktay, D., & Rustemli, A. (2018). Measuring the quality of urban life and neighbourhood satisfaction: Findings from Gazimagusa (Famagusta) area study. *International journal of social sciences and humanity studies*, *2*(2).

Rajabi Amirabad, R., & Rahmani, B. (2020). The role of urban spaces in improving quality of life: The city of Malayer. *Applied Research in Geographical Sciences*, *20*(58), 319-337.

Shakour, A., Ghaedsharafi, Y., & Meshksar, P. (2023). The role of urban parks and green spaces in improving urban quality of life: Shiraz municipal district 6. *Geography and Environmental Studies*, *19*(46), 110-129.

Shrivastava, V. (2019). Social sustainability of residential neighbourhood: A conceptual exploration. *International Journal on Emerging Technologies*, *10*(2), 427-434.

Veenhoven, R. (2013). The four qualities of life: Ordering concepts and measures of the good life. In *The exploration of happiness* (pp. 195-226). https://doi.org/10.1007/978-94-007-5702-8_11

Zhianpour, M., Khadem Al Fogharaei, M., Naji Esfahani, Z., & Jalali, M. (2023). Urban quality of life in Isfahan: Priorities and constituent themes. *Applied Sociology*, *34*(2), 27-44.