

SOCIAL INNOVATION AND URBAN VITALISM: Key Indicators for Creative and Resilient Cities

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ABSTRACT

The transition towards creative and resilient cities requires governance models that integrate social innovation, environmental sustainability and inclusive urban design. This study adopts the paradigm of urban vitalism as an integrative framework, operationalising five key dimensions—urban space, governance, social inclusion, environmental sustainability and economic resilience—into measurable indicators aligned with global urban agendas.

Based on survey responses from millennials, the study examines how these dimensions shape perceptions of the city of the future. The findings indicate that educational level and place of residence significantly influence priorities such as infrastructure, green spaces, participatory governance and economic opportunities. Social innovation emerges as a cross-cutting driver that enhances both resilience and citizen satisfaction. The study provides recommendations for policymakers and planners seeking to design cities that are environmentally responsible, economically competitive, socially inclusive and culturally vibrant.

1. Introduction

The twenty-first century is undoubtedly characterised by accelerated urban transformation, shaped, among other factors, by climate change, digitalisation, demographic pressure and the growing need for resilience, as noted by various authors (Cerdá and Ortego, 2024). According to the United Nations, more than 56% of the world's population currently lives in urban environments, and this figure is expected to reach 68% by 2050 (Kapucu et al., 2024; UN, 2016, 2020). This phenomenon not only redefines ways of inhabiting space but also poses unprecedented challenges in terms of sustainability, governance and social equity. In this context, traditional approaches to sustainable, smart, inclusive or resilient cities tend to fragment debates and disperse urban action (Qian et al., 2024; Sharifi et al., 2025). In contrast to these sectoral labels, the paradigm of urban vitalism emerges as an integrative framework that can be operationalised in urban governance practice through five key dimensions—urban space, governance, social inclusion, environmental sustainability and economic resilience—and places citizens' perceptions at the centre of planning and public debate (Nederhand et al., 2023; Winslow and Coenen, 2023).

One of the cross-cutting drivers of this paradigm is social innovation, understood as the collective capacity to generate creative solutions to complex urban problems through the collaboration of public, private and community actors (Lee et al., 2022). Unlike isolated technological innovation, social innovation fosters cohesion, participation and urban creativity, and enables international agendas such as the Sustainable Development Goals (SDG 11), the UN-Habitat New Urban Agenda and the European Green Deal to be translated into concrete practices of inclusive governance (Cash-Gibson et al., 2025; Luo et al., 2025). In this context, the millennial generation (1981–1996) constitutes a privileged lens through which to examine these issues. Shaped by globalisation, labour precarity and environmental awareness, millennials tend to value creativity, equity and resilience as essential components of urban vitality (Chang and Spierings, 2023; Sciuva, 2025). Their perceptions provide a generational barometer capable of anticipating the social demands that will shape the coming decades.

Despite the relevance of this approach, the literature still lacks empirical studies that operationalise perceptual indicators of urban vitalism and link them directly to social innovation. Much of the existing research has focused on discussing theoretical frameworks or evaluating specific policies (Amegavi et al., 2025; Zucaro and Agostinho, 2025), without generating comparable metrics that allow citizens' perceptions to be integrated into urban planning. It is within this gap that the present article makes its contribution.

This article is structured as follows. First, the theoretical framework on urban vitalism and social innovation is presented, highlighting their relationship with global agendas and recent literature. Next, the study methodology is described, with particular attention to the construction and validation of the research instrument. The main results are then presented, including both descriptive analyses and the identification of social innovation as a cross-cutting axis. In the discussion section, the findings are interpreted in dialogue with current academic debates, emphasising their implications for governance and urban design. Finally, conclusions, limitations and future research directions are outlined. Ultimately, the article aims to provide empirical evidence connecting citizens' perceptions, social innovation and urban vitalism.

2. Literature Review

2.1. *The Urban Vitalism Paradigm as an Integrative Approach*

In recent years, the contemporary literature on cities has been characterised by the proliferation of labels which, although valuable in themselves, tend to fragment both the analysis and practice of the urban phenomenon: sustainable cities (Sharifi et al., 2025), smart cities (Qian et al., 2024), resilient cities (Kapucu et al., 2024) and creative cities (Wise et al., 2022). This fragmentation

generates a certain “semantic inflation”, in which concepts become rhetorical frameworks rather than guides for action (Schraven et al., 2021).

In this context, the paradigm of urban vitalism emerges as an integrative proposal in response to this landscape. In contrast to partial approaches, urban vitalism seeks to articulate within a single analytical framework both the material dimensions of quality of life in cities (such as infrastructure, services or governance) and perceptual dimensions (subjective well-being, inclusion and participation). In this way, the paradigm is consolidated as an alternative for interpreting urban complexity in a context of accelerated urbanisation and climate crisis (Kapucu et al., 2024; Sharifi et al., 2025). Its central premise is that urban vitality cannot be reduced to physical or purely sectoral indicators of material well-being in the city; rather, in line with recent theoretical contributions, it should be understood as the dynamic interaction of five key dimensions: urban space, governance, social inclusion, environmental sustainability and economic resilience (Nederhand et al., 2023; Winslow and Coenen, 2023).

Unlike traditional metrics based on theoretically objective indicators, such as gross domestic product (GDP), greenhouse gas emissions or the density of urban infrastructure, urban vitalism incorporates perceptual indicators as a way of overcoming objectivity-biased perspectives. It seeks to conceptualise how citizens experience and evaluate their everyday lives in the city in relation to key dimensions relevant to understanding quality of life in urban environments (Andal, 2023). From this perspective, a green space is not measured solely in hectares but, for example, in terms of perceived accessibility, safety and its capacity to foster community interaction, as aspects that complement the mere quantification of urban tree coverage. Ultimately, this approach introduces at least three conceptual innovations worthy of consideration:

- It overcomes sectoral logic: it avoids the juxtaposition of labels used to qualify the city (smart, green, resilient) and offers a coherent narrative of urban life.
- It introduces vitality as a dynamic indicator: the city is understood as a living organism, in constant adaptation and transformation.
- It places citizens at the centre: perceptions of spatial justice, institutional trust or cultural inclusion become criteria of legitimacy as important as technical data (Buttazzoni et al., 2025).

Furthermore, and in close relation to the theoretical foundations outlined here, the urban vitalism paradigm aligns directly with the most relevant global and European agendas in the field of urban development. This is the case, for example, with the Sustainable Development Goals (SDGs), particularly SDG 11 (UN, 2016, 2020), which aims to “make cities inclusive, safe, resilient and sustainable”; a goal that ultimately requires the development of both objective and perceptual indicators of quality of life in cities. In a similar vein, the New Urban Agenda (UN-Habitat, 2016; 2020 revision) advances a comparable approach, prioritising citizen participation, cultural integration and equity as conditions for urban development.

Building on the above, it should also be noted that policy frameworks such as the European Green Deal and the Cities Mission (EU, 2019–2025) emphasise aspects such as decarbonisation and digital innovation as key axes of urban competitiveness, reinforcing the need to integrate citizens’ perceptions into the ecological transition (Cerdá and Ortego, 2024). In this sense, these agendas open the way for translating perceptions into public policies directly applicable to urban planning and governance.

2.2. Social Innovation as a Driver of Urban Vitalism

In the field of spatial planning, social innovation has become established as a key concept for understanding processes of urban transformation in the twenty-first century. Defined as the capacity to generate new solutions to social problems through collaborative, inclusive and sustainable processes (Lee et al., 2022), it differs from purely technological innovation in that its emphasis lies on the social, cultural and community value of change, rather than on technical

efficiency per se. In this sense, within the framework of urban vitalism, social innovation can be understood as a cross-cutting principle that connects the five dimensions:

- In urban space, it promotes the co-production of solutions for the use of public spaces and sustainable mobility (Nikitas et al., 2024).
- In governance, it enables co-design processes and citizen laboratories, strengthening transparency and institutional legitimacy (Przeybilovicz et al., 2020).
- In social inclusion, it fosters redistributive projects in housing, health and education (Cash-Gibson et al., 2025).
- In economic resilience, it supports creative entrepreneurship, local SMEs and circular economies.
- In environmental sustainability, it articulates community-based practices in recycling, water management and energy transition (Amegavi et al., 2025).

In summary, social innovation may be understood as a catalyst for resilience: ultimately, it transforms the adaptive capacity of cities into a shared process that mobilises intangible resources such as trust, collective creativity and social capital (Becker et al., 2023). In contrast to forms of technological innovation associated with the digitalisation characteristic of smart cities, social innovation focuses on the capacity of communities to develop participatory processes—such as citizen laboratories, urban co-design or participatory budgeting—which reinforce both institutional legitimacy and the vitality of urban space (Bastos et al., 2022; Winslow and Coenen, 2023).

2.3. Subjective Indicators for Measuring Urban Vitalism

One of the most recent contributions of this paradigm is the proposal to operationalise vitality through perceptual indicators, which make it possible to measure how citizens experience the city, providing a complement to technical metrics. In this regard, the literature has identified at least three justifications for their use: democratic legitimacy (citizens' perceptions determine the acceptance of urban policies: Hardi et al., 2025); predictive value (anticipating social and political trends that are not always visible in traditional indicators: Chang and Spierings, 2023); and multidimensionality (capturing interactions between subjective well-being, social cohesion and environmental sustainability).

In this study, the indicators are grouped around five dimensions (urban space, governance, social inclusion, economic resilience and sustainability), which makes it possible to analyse not only the mean values of each dimension, but also the interactions between perceptions and how these are shaped by sociodemographic factors such as educational level or place of residence. Ultimately, the theoretical framework presented here allows urban vitalism to be understood as a proposal that transcends the fragmentation of traditional labels (smart, sustainable, creative or resilient cities), integrating them within a unified model. Within this model, social innovation is configured as a cross-cutting driver that connects five key dimensions—urban space, governance, social inclusion, sustainability and economic resilience—with citizens' perceptions of how cities of the future should be shaped.

3. Methodology

This study forms part of an international project funded by the Universidad Internacional de La Rioja (UNIR, Spain), whose aim was to characterise millennials' perceptions of the attributes of future cities. The research adopted a quantitative, exploratory and cross-sectional design, oriented towards capturing perceptual trends rather than developing complex statistical models and focused on the operationalisation of the urban vitalism paradigm across the five dimensions identified in the literature review.

The target population consisted of individuals from the millennial generation (1981–1996) residing in urban environments within the scope of the study. To ensure diversity, purposive and stratified sampling was employed based on gender, educational level and type of residence

(medium-sized city, large city, metropolitan area). The final sample comprised 386 valid cases, distributed between Spain and other Latin American countries associated with the project.

The data collection instrument was designed based on a review of the literature on creative cities, resilience and urban vitalism (Sharifi et al., 2025; Wise et al., 2022). It consisted of 30 items distributed across the five dimensions analysed (Likert scale from 1—strongly disagree—to 5—strongly agree: Table 1).

Table 1. Correspondence between conceptual dimensions and questionnaire items

Dimension	Indicators
Urban space and liveability	1. The city offers sufficient accessible, high-quality green spaces. 2. Urban mobility is sustainable (public transport, cycling, walking). 3. The preservation of cultural heritage strengthens urban identity. 4. Public spaces are inclusive and encourage social interaction. 5. Equitable access to basic services (health, education, leisure). 6. Urban planning promotes a compact and liveable environment.
Urban governance	7. There are effective channels for public participation. 8. Public administration is transparent and accountable. 9. Local authorities promote collaboration between social actors. 10. The government is perceived as open and close to the public. 11. Digital innovation is used to improve governance. 12. There is trust in urban institutions.
Social inclusion and cohesion	13. There is equitable access to affordable and decent housing. 14. Education is inclusive and of high quality. 15. Cultural and leisure activities are accessible to all social groups. 16. The city promotes intergenerational equity (young people/older people). 17. Accessible health and welfare services are guaranteed. 18. Social diversity fosters community cohesion and harmony.
Economy and resilience	19. The city offers opportunities for decent and stable employment. 20. There are policies on the circular economy and responsible consumption. 21. Technological innovation is geared towards inclusion. 22. Entrepreneurship and SMEs are supported. 23. The local economy is diversified and resilient to crises. 24. The creative and cultural industries generate value and employment.
Environmental sustainability	25. Effective climate change mitigation policies are implemented. 26. Urban waste management is efficient. 27. Air and water quality are guaranteed. 28. The city protects its biodiversity and urban ecosystems. 29. There is infrastructure resilient to droughts, floods and extreme weather events. 30. The use of renewable and clean energy is promoted.

Source: Own elaboration, 2026.

Data collection took place in December 2024 through an online questionnaire distributed via academic networks and institutional collaborations: Universidad Internacional de La Rioja (UNIR), Universidad Europea Miguel de Cervantes (UEMC), Universidad Técnica Federico Santa María (USM) and EAE Business School. Participation was voluntary, with guarantees of anonymity and confidentiality, in accordance with the ethical protocols of the coordinating university.

Given that the central objective of the study was to validate the overall structure of the questionnaire as an integrated data collection instrument, descriptive statistical analyses of the items were complemented by prior examination of reliability and validity, as described below through exploratory and confirmatory analyses.

4. Results

4.1. Sample Profile

Overall, the sample profile, in relation to key sociodemographic variables, was as follows: gender (women, 52%; men, 46%; and other/no response, 2%), educational level (higher education, 67%; post-compulsory secondary education, 28%; and other, 5%) and place of residence (medium-sized city, 32%; large city, 48%; and metropolitan area, 20%).

To complement this basic descriptive profile, cross-tabulations were conducted between key sociodemographic variables (age, gender, educational level and type of residence), with the aim of identifying distribution patterns that could influence urban perceptions.

The most relevant results are summarised below (Table 2). These indicate that educational level and place of residence are the variables that most strongly shape the sample profile. In particular, millennials with higher education tend to be concentrated in metropolitan environments, in line with the literature reviewed in this study. By contrast, the gender variable does not show significant differences with respect to place of residence.

Table 2. Cross-tabulation of the sample by sociodemographic variables

Cross-tabulated variables	Main categories %	% of the sample	Association (χ^2)
Gender × Education	Women with higher education, predominant	34%	p < 0.05
	Men with post-compulsory secondary education	21%	
Age × Residence	Young people (aged 27–32), more concentrated in large cities	38%	p < 0.05
	33–38 age group, in medium-sized towns and metropolitan areas	29%	
Education × Residence	University graduates, over-represented in metropolitan areas	29%	p < 0.05
	Lower proportion of graduates in medium-sized towns	15%	
Gender × Residence	Balance between women and men in all types of residence	—	n. s.

Source: Own elaboration, 2026.

4.2. Reliability and Validity of the Instrument

The psychometric validation of the questionnaire was conducted in two complementary phases: an exploratory factor analysis (EFA) and a second-order confirmatory factor analysis (CFA), with the aim of verifying the theoretical five-dimensional structure proposed in the urban vitalism model.

In the first phase of the analysis (EFA), the principal components method with Varimax rotation was applied, following verification of the assumptions of sampling adequacy. The Kaiser–Meyer–Olkin (KMO) index reached a value of 0.87, confirming the suitability of factor analysis. Bartlett’s test of sphericity was significant (χ^2 (435) = 2154.32, p < 0.001), demonstrating sufficient correlations among the variables to conduct the analysis. In summary, the factorial solution yielded a five-factor structure consistent with the proposed theoretical framework: urban space, governance, social inclusion, economy and resilience, and environmental sustainability. In this regard, the items showed factor loadings above 0.60 within their respective dimensions, with no relevant cross-loadings. The total variance explained reached 71.2%, with eigenvalues ranging between 4.25 and 4.59 per factor, indicating an adequate explanatory capacity of the model.

Internal reliability of the instrument was assessed using Cronbach’s alpha coefficient, obtaining an overall value of $\alpha = 0.92$, while all individual dimensions presented values of $\alpha > 0.80$ (Table 3).

Table 3. Results of exploratory factor analysis (EFA) and reliability of the instrument

Dimension	No. of items	Factor loadings (range)	Cronbach's alpha (α)	Explained variance (%)
Urban space and liveability	6	0.63 – 0.84	0.86	14.8
Urban governance	6	0.68 – 0.82	0.88	13.9
Social inclusion and cohesion	6	0.65 – 0.83	0.87	14.3
Economy and resilience	6	0.61 – 0.79	0.84	13.6
Environmental sustainability	6	0.67 – 0.85	0.89	14.6
Total / Overall	30	—	0.92	71.2

Source: Own elaboration, 2026.

In the second phase of the validation analysis, a second-order confirmatory factor analysis (CFA) was conducted using maximum likelihood (ML) estimation. The hypothesised model, which groups the five dimensions under a general construct of urban vitalism, showed an adequate fit: CFI = 0.93, TLI = 0.92, RMSEA = 0.06 and SRMR = 0.05, confirming the convergent validity and structural coherence of the model. Each factor represented a clearly defined perceptual axis, with robust factor loadings and no significant overlap between dimensions, thereby supporting the discriminant validity of the instrument (Table 4).

In this regard, the first dimension, Urban space, grouped items related to the quality of public spaces, sustainable mobility and accessibility to green infrastructure. It is characterised by its strong correlation with indicators of liveability and subjective well-being. The second dimension, Governance, integrated perceptions of institutional transparency, citizen participation and public-private collaboration, reflecting the degree of perceived legitimacy in urban management. The third dimension, social inclusion, synthesised evaluations relating to intergenerational equity, access to housing, basic services and culture, functioning as a cross-cutting indicator of community cohesion. The fourth dimension, Economy and resilience, grouped items associated with innovation, decent employment, circular economy and responsible consumption, describing the adaptive capacity of the productive system. Finally, the fifth dimension, Environmental sustainability, concentrated elements related to waste management, air quality, climate change mitigation and urban biodiversity.

Table 4. Results of the second-order confirmatory factor analysis (CFA)

Fit index	Value	Acceptance criterion	Interpretation
χ^2 / df	2.11	< 3.00	Adequate fit
CFI	0.93	> 0.90	Good overall fit
TLI	0.92	> 0.90	Structural coherence
RMSEA	0.06	< 0.08	Acceptable approximation error
SRMR	0.05	< 0.08	Satisfactory residual fit
Correlations between dimensions	$r = 0.58 - 0.72$ ($p < 0.001$)	—	High functional interdependence
Total variance explained (model)	71.2 %	—	Solid and consistent structure

Source: Own elaboration, 2026.

The CFA results confirmed the representation of each dimension and their convergence within the construct of urban vitalism in the context of this study, as shown in Table 4. The fit indices made it possible to conclude that participants' perceptions were organised around a common core integrating sustainability, creativity and social inclusion. Furthermore, the correlation analysis between dimensions revealed significant associations ($r = 0.58-0.72$, $p < 0.001$), demonstrating the functional interdependence between governance, sustainability and social cohesion. In

particular, within this study the Governance dimension acts as a mediator between structural factors (Urban space, Economy) and perceptual factors (Inclusion, Sustainability), reinforcing the idea that urban vitality depends not only on material infrastructure but also on social capital.

For the comparative analysis presented below, composite scores (using weighted means) were calculated from the items corresponding to each of the five dimensions validated in the model. These composite variables made it possible to represent perceptions of urban vitalism in a synthetic manner. In particular, analyses were conducted to compare differences in mean scores between groups defined by educational level and type of residence, two variables previously identified in the literature as influential. The use of aggregated dimensions reduced the noise associated with individual items and reinforced the stability of comparisons between subgroups.

Accordingly, a one-way analysis of variance (ANOVA) with Tukey post-hoc tests was conducted, revealing statistically significant perceptual differences according to educational level ($F(2,383) = 5.47, p < 0.01$) and type of residence ($F(2,383) = 6.02, p < 0.01$; Table 5). Participants with higher levels of education tended to evaluate the dimensions of governance and sustainability more positively, suggesting greater sensitivity towards participatory planning and environmental management. By contrast, those living in metropolitan or high-density areas reported lower levels of satisfaction with social inclusion and liveability, indicating tensions between economic development and urban quality of life. At the same time, they rated the economic and resilience dimension more positively, associating urban vitality with labour dynamism and professional opportunities. Meanwhile, respondents residing in medium-sized cities showed greater satisfaction with social inclusion and community cohesion, in line with perceptions of a more manageable urban scale and closer neighbourhood relationships.

Table 5. Results of the analysis of variance (ANOVA) according to educational level and type of residence

Dimension	Independent variable	F (df)	p-value	Observed trend
Urban space and liveability	Type of residence	4.21 (2,383)	0.016	Greater satisfaction in medium-sized cities than in metropolitan areas
Urban governance	Level of education	5.47 (2,383)	0.005	Higher evaluation among participants with higher education
Social inclusion and cohesion	Type of residence	6.02 (2,383)	0.003	Lower ratings in densely populated metropolitan areas
Economy and resilience	Educational attainment	3.84 (2,383)	0.022	University graduates place greater value on innovation and green employment
Environmental sustainability	Level of education	4.96 (2,383)	0.008	Greater environmental awareness among groups with higher educational attainment
Global (total urban vitalism)	Educational level + residence	6.15 (4,381)	0.001	Education and residence explain significant perceptual differences

Source: Own elaboration, 2026.

These results reinforce the relevance of educational level and place of residence as explanatory variables of perceptions of urban vitalism and confirm the validity of the instrument as an empirical tool for measuring citizens' attitudes towards creative and resilient cities.

4.3. General Descriptive Statistics for the Questionnaire by Dimension

Regarding the descriptive statistical analysis of the questionnaire dimensions, the mean item scores ranged between 3.7 and 4.4 on the Likert scale (1–5), indicating positive and relatively homogeneous perceptions across most urban dimensions. The highest-rated dimensions were Environmental sustainability ($M = 4.4, SD = 0.6$) and Urban space ($M = 4.3, SD = 0.7$), whereas Economy and resilience ($M = 3.7, SD = 0.8$) received the lowest ratings.

These trends confirm that, within this study, millennials attributed greater importance to ecological and urban well-being factors than to strictly economic ones, while expressing a more critical stance towards urban governance and institutional transparency. Furthermore, the dispersion values indicate moderate perceptual consistency, particularly in the environmental and spatial dimensions, suggesting that participants share relatively stable criteria regarding the importance of the physical environment and sustainability as central components of urban quality of life (Table 6).

Table 6. General descriptive results for the questionnaire

Dimension	Mean	Standard deviation	Interpretation
Urban space and liveability	4.3	0.7	High appreciation of public spaces and sustainable mobility
Urban governance	3.8	0.9	Interest in transparency and participation
Social inclusion and cohesion	4.0	0.8	Sensitivity to equity and culture
Economy and resilience	3.7	0.8	Moderate expectations regarding employment and entrepreneurship
Environmental sustainability	4.4	0.6	Priority given to environmental and ecological well-being

Source: Own elaboration, 2026.

Ultimately, the overall analysis of the results suggests that social innovation acts as a cross-cutting pattern connecting the five dimensions of the model. Participants do not perceive urban policies as isolated compartments, but rather as interdependent ecosystems in which creativity, sustainability and governance mutually reinforce one another. In structural terms, environmental sustainability and urban space emerge as the most consolidated pillars of urban vitalism. Both factors are directly associated with perceptions of subjective well-being and quality of life. In functional terms, governance emerges as a mediating variable: its strength depends on citizen participation and institutional transparency, elements that increase collective trust and the willingness to collaborate in processes of urban innovation.

Meanwhile, social inclusion and economic resilience constitute the human dimension of urban vitalism, translating the principles of sustainable development into everyday practices. The results confirm that millennials place particular value on intergenerational equity and decent employment as essential conditions of a “living” city. From a strategic perspective, these findings indicate that urban planning models should incorporate perceptual indicators alongside traditional metrics of infrastructure or economic growth. Measuring perceptions of liveability, governance and inclusion provides key complementary information for guiding urban policies towards legitimacy, sustainability and social creativity.

Finally, the overall pattern of results demonstrates that educational level and residential environment directly influence perceptions of urban vitalism, suggesting that the most innovative and sustainable cities will be those capable of simultaneously promoting human capital, social cohesion and participatory governance.

5. Discussion, Conclusions and Implications, Limitations and Future Research

5.1. Discussion

In line with the findings presented in the previous section, the results of this study confirm that urban vitalism operates as a paradigm capable of integrating perceptions relating to space, governance, inclusion, economy–resilience and sustainability, while reaffirming that social

innovation acts as a cross-cutting catalyst connecting these dimensions within concrete urban experiences. Unlike previous studies in this line of analysis, which have been more conceptual in nature, the five-factor structure presented here is operationalised and empirically validated on a millennial population, demonstrating a psychometrically validated construct that reflects the relevance of educational level and type of residence in shaping perceptions of the key dimensions that define the cities of the future.

In this respect, the five-dimensional factorial solution replicates the integrative logic proposed by urban vitalism, overcoming the fragmentation produced by different labels associated with the ideal city of the future ("smart", "sustainable", "resilient", "creative", etc.), while revealing the interdependencies between the factors that define it. This pattern supports the proposition that urban vitality depends simultaneously on material infrastructures (space, mobility, services) and sociopolitical capacities (governance, cohesion, participation) that shape urban life (Nederhand et al., 2023; Winslow and Coenen, 2023). The consistency of the second-order construct suggests that citizens' perceptions synthesise different attributes within a common core of vitality that articulates creativity, inclusion and sustainability as a coherent whole defining what a future city should be.

Moreover, within the model presented here, governance emerges as an essential link between more structural dimensions (space, economy) and more perceptual ones (inclusion, sustainability). In this sense, when transparency, accountability and effective channels for participation are perceived to exist, both satisfaction with public space and trust in environmental and social policies increase (Becker et al., 2023; Lee et al., 2022). Ultimately, this reinforces recent evidence linking institutional openness and civic innovation with greater legitimacy and social capital (Bastos et al., 2022; Cash-Gibson et al., 2025). In terms of public policy design in urban management, the strategy is clear: without participatory governance, there can be no sustainable urban vitality capable of enduring over time.

Furthermore, social inclusion is confirmed as an enabling condition of vitality, guaranteeing access to housing and services (healthcare, education, culture) as well as perceptions of intergenerational equity; both aspects are stronger predictors of subjective well-being in relation to future cities than purely infrastructural improvements alone (Buttazzoni et al., 2025; Yuan et al., 2025b). The evidence of lower inclusion ratings in densely populated metropolitan areas suggests clear tensions between economic dynamism and everyday quality of life, already observed in studies on cultural gentrification and placemaking (Chang & Spierings, 2023). For the urban vitalism paradigm, this implies prioritising redistributive policies and accessible culture as mechanisms of cohesion and recognition (Landoni et al., 2019; Wise et al., 2022).

In terms of well-being, environmental sustainability emerges as both the highest-rated dimension and a criterion of political legitimacy. Air quality, waste management, green-blue infrastructure and climate adaptation function as markers of trust and subjective well-being (Cash-Gibson et al., 2025; Sharifi et al., 2025). In line with the literature, perceptions of environmental performance are associated with stronger support for ecological transition and responsible consumption practices (Qian et al., 2024; Zucaro and Agostinho, 2025). The empirical coupling between sustainability and inclusion reinforces the notion of environmental justice as a backbone of urban vitalism (Agyeman, 2008).

With regard to the relationship between economy and creativity, the scores obtained for economy and resilience privilege innovation, diversification, support for SMEs, circular economy and creative industries over quantitative growth without equity (Amegavi et al., 2025). This is consistent with evidence showing that the most vital cities connect technological capacities with public values (inclusion, transparency, accessibility) in order to translate digitalisation into well-being and participation (Nederhand et al., 2023; Qian et al., 2024). Creativity, in particular, intensifies the links between urban identity, economic attractiveness and social cohesion (Wise et al., 2022).

As regards the relevance of social innovation in the urban management of public affairs, across all dimensions the items linked to social innovation (co-design, urban laboratories, participatory

budgeting, open platforms, etc.) are associated with higher overall evaluations of vitalism. Ultimately, this is consistent with the literature documenting the role of co-creation as a mechanism for accelerating institutional learning and aligning global agendas (SDG 11, the New Urban Agenda, the Green Deal, the EU Cities Mission) with citizens' expectations (Cash-Gibson et al., 2025; Luo et al., 2025). Empirically, social innovation transforms latent capacities into visible outcomes (active public spaces, sustainable mobility, inclusive services).

It should be noted that, as anticipated in the literature, educational level and place of residence function as key explanatory variables. Individuals with higher educational attainment place greater value on governance and sustainability, probably due to greater exposure to public information and to more efficient evaluative frameworks regarding urban public policies linked to territorial planning (Lee et al., 2022; Lowe et al., 2025). Meanwhile, living in densely populated metropolitan areas is associated with lower satisfaction regarding inclusion and liveability, suggesting that pressure on housing and public space erodes perceptions of vitality, even in innovative contexts. For urban policy, this implies the need for carefully calibrated territorial adjustments: protecting affordable housing and recalibrating the mix of uses and facilities in high-density neighbourhoods become priorities of urban public management.

In this sense, urban vitalism is conceived not merely as a theoretical framework for analysis, but as an instrument for action that links creativity, social innovation and resilience with concrete practices of participatory urban governance, reinforcing the idea that the future of cities will largely depend on their capacity to integrate material and perceptual dimensions within a shared strategic horizon.

Recent literature also emphasises the generational dimension. Millennials, having grown up in a context shaped by labour precarity, globalisation and digitalisation, display particular sensitivity towards intergenerational equity, access to housing and environmental sustainability (Chang & Spierings, 2023; Yuan et al., 2025a). This perspective is especially important because it translates academic debates into collective narratives capable of legitimising—or challenging—political action.

5.2. Conclusions and Implications

In addition to the above, urban vitalism offers a conceptual bridge between the international agendas guiding contemporary urban planning: SDG 11 ("make cities inclusive, safe, resilient and sustainable"), the UN-Habitat New Urban Agenda (UN, 2020), the European Green Deal and the EU mission for climate-neutral cities (Ciuculescu and Luca, 2025). All of these underline the need to articulate environmental policies alongside social justice, recognising citizens' perceptions as a component of legitimacy and effectiveness in urban governance.

Finally, this article differs from previous contributions in that it emphasises the empirical operationalisation of the paradigm. Rather than focusing exclusively on conceptual narrative, the study proposes a set of empirically validated perceptual indicators organised into five dimensions: urban space, governance, social inclusion, environmental sustainability and economic resilience. These indicators make it possible to connect urban vitalism with strategic planning, offering evidence for urban managers and policymakers. The relevance of the theoretical paradigm of urban vitalism lies in its capacity to provide comparable and transferable tools for evaluating the future of cities from a generational and empirical perspective.

Furthermore, this study makes three important theoretical and applied contributions: (i) the psychometric validation of a five-dimensional perceptual instrument aligned with urban vitalism as a paradigm and theoretical framework of reference; (ii) evidence that social innovation is transversal and actionable—not merely discursive—in improving perceptions of what the ideal city of the future should be according to certain groups of urban residents; and (iii) the demonstration that educational level and place of residence shape urban experience, enabling more precise policy segmentation from the perspective of urban management. In doing so, the

study advances from conceptual narrative towards indicators applicable to the monitoring and evaluation of urban policies.

In terms of strategic implications for public managers and policymakers, the findings of this research suggest prioritising different integrated policy packages:

- Open governance + social innovation, in order to sustain legitimacy and learning in urban development
- Affordable housing + inclusive culture and education, as guarantees of cohesion in urban planning
- Green-blue infrastructure + circular economy, as a basis for resilience
- Differentiated strategies according to residential typology and educational profiles, with the aim of refining the implementation of what a successful future city should be

In sum, urban vitalism is confirmed as an operational lens for designing, measuring and governing more creative, resilient and inclusive cities, while social innovation emerges as the driving force capable of transforming global agendas into perceptible improvements in everyday urban life.

5.3. Limitations and Future Research

Despite the results obtained, this study presents certain limitations that should be explicitly acknowledged. First, the non-probabilistic sample—intentional and stratified in nature—limits the possibility of generalising the findings to the wider millennial population or to other age groups. Although the geographical and educational diversity of the sample provides interpretative richness, it would be advisable to broaden the scope through random and representative sampling in future stages of the project.

Second, the cross-sectional nature of the study prevents the capture of temporal variations in the perceptions of the group analysed here. Given that urban vitality and social innovation are dynamic processes, future research should incorporate a longitudinal design capable of observing how perceptions evolve in response to economic, technological or environmental change.

Third, although the questionnaire demonstrated high reliability and factorial validity, its structure focused primarily on perceptual dimensions. Future integration of objective indicators—for example, metrics relating to pollution, mobility, social network density or investment in culture, complementing the aspects addressed here—would make it possible to compare citizens' perceptions with real urban performance data, thereby strengthening the convergent validity of the model.

Furthermore, the study focused specifically on the millennial generation. Given the growing relevance of Generation Z in urban life and in the adoption of digital technologies, it would be valuable to expand the intergenerational analysis, examining how priorities regarding sustainability, participation and creativity differ across generations.

Finally, future lines of research could include intercultural comparative analyses between European and Latin American cities, as well as the use of mixed methods (surveys combined with interviews and urban data mining) in order to capture deeper narratives relating to belonging and urban well-being. Taken together, these proposals would contribute to the development of a validated and comparative model of perceptual indicators of urban vitalism, useful for monitoring progress within the agendas of creative and resilient cities and for informing the creative design of the cities of the future.

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