Abstract:

In 2019 Juul Frost Architects launched the interdisciplinary development project 'The Urban Health Culture of the Future', supported by Realdania with the aim to secure the link between health and planning. The project has resulted in the publication 'The Urban Health Culture of the Future' that features an analytical tool, four cases, contributions from the think tank, urban theories, and a toolbox, that we hope will inspire new strategic and multidisciplinary partnerships between local health and planning actors.

The following paper presents excerpt or takeaways from the project, more specifically, from the tools developed. The aim of the tool is to ensure that considerations of health and well-being are explicitly reflected in planning. Thus, the tools can be used to promote the United Nations' Sustainable Development Goals, more specific Goal 3.: Ensure healthy lives and promote well-being for all at all ages, and Goal 11.: Make cities and human settlements inclusive, safe, resilient, and sustainable.

Keywords: health, approach, urban development, planning, culture, architecture, landscape architecture

Tools to promote physical, mental, and social well-being in the built environment - takeaways from the development project 'The Urban Health Culture of the Future

0. Introduction

Urbanization challenges our urban health

Around the world, more and more people are gathering in cities. Today, more than 55% of the world's population lives in urban areas, and this is expected to rise to 68% over the next 20–30 years. As the population in urban areas grows, the design of cities and urban areas plays an increasingly important role in people's quality of life and health. This creates challenges and opportunities: On the one

hand, many urban environments set the scene for inactivity and loneliness, among other things. On the other hand, health promoting measures and initiatives can have a strong impact in densely populated environments.

Urbanisation creates a need for a new urban health culture that integrates health into planning and ensures the prioritization of well-being in the built environment.

The Urban Health Culture of the Future

In 2019 Juul Frost Architects launched the interdisciplinary development project 'The Urban Health Culture of the Future', supported by Realdania with the aim to secure the link between health and planning. 'The Urban Health Culture of the Future' is a holistic and interdisciplinary approach to the planning and urban development across various scales, categories of needs and sectors.

Through the project 'The Urban Health Culture of the Future' we have gathered knowledge, analysed best practice cases in different scales and developed applicable tools to promote physical, social, and mental well-being¹ through the close collaboration with an interdisciplinary think tank and with Holbæk and Aalborg Municipality as project partners.² Building on cases and best practice from Europe, the sketched interventions will be more feasible in economically advantaged countries and generally integrated cities.

The project has resulted in the publication 'The Urban Health Culture of the Future' (2022) that features an analytical tool, four cases, contributions from the think tank, urban theories, and a toolbox, that we hope will inspire new strategic and multidisciplinary partnerships between local health and planning actors.

¹ According to WHO's definition of health

² The members of the think tank and the two municipalities have continuously contributed with their experience and knowledge to the project. The think tank has been composed of complementary disciplines and chosen to ensure knowledge in the focus areas of the project. The members are: Bodil V. Henningsen, architect, Master in Strategic Planning, Aalborg Municipality, Urban Development and Construction; Christer Larsson, Architect SAR/MSA, KKH, former director of Urban Planning, Adjunct Professor of Architecture; Jasper Schipperijn, Professor, PhD, MSc, Department of Sport Science and Clinical Biomechanics, University of Southern Denmark; Jesper Lund Bredesen, doctor, divisional director H. Lundbeck A/S; John Pløger, Professor Emeritus, University of Agder; Karin K. Peschardt, landscape architect, PhD Strategic Planner, Holbæk Municipality, Planning and Business; Katrine Winther, anthropologist, Head of Social Initiatives AKB Taastrupgaard; Morten Klöcker Grønbæk, professor, PhD, D.M.Sc. Director of the National Institute of Public Health, SDU; Peter Hanke, chairman, Associate Fellow at Oxford University, Saïd Business School and Rasmus B. Andersen, architect, team leader, Urban Development and Facilities, DGI

Takeaways: Excerpts from the tools

The following paper presents excerpt or takeaways from the project, more specifically, from the tools developed. The aim of the tool is to ensure that considerations of health and well-being are explicitly reflected in planning. We need to ensure that mental, physical, and social needs are addressed from a holistic and balanced perspective and across scale – followed by a focus on the concrete effects on our behaviour. Thus, the tools can be used to promote the United Nations' Sustainable Development Goals, more specific Goal 3.: Ensure healthy lives and promote well-being for all at all ages, and Goal 11.: Make cities and human settlements inclusive, safe, resilient, and sustainable.

1. Equal opportunities for well-being

Health inequalities are increasing. The area where you live and your socioeconomic background have a big impact on your chances of good health, the length of your life and your well-being. Health inequalities are complex. School, housing, and health policies as well as planning and the physical environment are important factors.

1.1 CREATE INTERDISCIPLINARY VISIONS THAT COMMIT

If urban development is to contribute to well-being and quality of life of all, it requires shared visions as a basis for action. Visions that ensure shared goals, ambitions and commitment across municipal administrations, sectors, relevant actors, and different disciplines. Start by creating shared visions that commit you to partnerships, and then make explicit demands. Ensure that pragmatism and demands do not stifle creativity in the visioning process, but rather let the vision define the requirements for development.

Set up multidisciplinary working groups that, together, can develop consistent visions for which all relevant actors feel ownership: Make sure that all actors are able to see themselves, their concrete goals, and ambitions in the vision. This ensures commitment to and responsibility for the process and project. Highlight the effects that can be achieved by having a common direction.

1.2 Make explicit demands

Health-promoting planning requires a firm focus on the importance of both concrete and long-term interventions. The design of the city should make it easy to make healthy choices and invite movement, social encounters, and mental recovery. In concrete terms, this means ensuring that everyone has access to opportunities, choices and services that promote well-being and quality of life. For example, recreational green spaces, safe pedestrian and bicycle connections, and healthy housing without noise and air pollution.

Explicit goals and requirements are needed in policies, strategies, planning documents and competition programmes. Such explicit objectives and requirements create greater awareness among all regarding the physical environment as the framework for new behaviours and lifestyles.

This gives planners a mandate to act which serves as a foundation for new planning practices. Well-being must be a norm in planning, not just an ambition.

1.3 Form partnerships and alliances and invite more actors in

We need to work together on the healthy cities of the future from a broader perspective. We need to look at city, housing, work, leisure, climate, sustainability, and social, physical, and mental well-being as interlinked factors. This requires a new, closely synchronised, and equal cooperation practice between administrations and disciplines as well as early involvement of relevant actors where everyone feels ownership and responsibility for the process.

Prioritise cooperation and appoint a cooperation officer who can organise cooperation across administrations, disciplines, and actors on an ongoing basis. The person responsible can ensure close communication about the project.

1.4 Plan holistically across scales, needs and sectors

Work holistically and based on needs across scales to ensure coherent urban development and synergies between interventions. For example, an integrated mobility and urban space strategy across scales can ensure space for the creation of more recreational and green urban spaces. Or Use the 20-minute city as a guideline for integrated urban development across scales, addressing the needs of the city and its citizens from a holistic perspective (see 5.1 Mix up the city and pave the way for an active movement culture). Targeted urban development requires a basic needs assessment.

2. Take a needs-based approach to ensure quality of life for all

For some, well-being and quality of life are linked to physical, mental, and social well-being. For others, it is linked to self-realisation and zest for life or moods, cosiness, and atmosphere. The concept of health encompasses inherent paradoxes, stretched between asceticism, zest for life, absence of illness, self-discipline, and thousands of tips for prevention. Life is stages, life-shaping and changing values and preferences, thus 'the way we thrive' also changes. (Pløger J 2022) (Hanke P 2022) There is a need for a needs-based and coordinated approach, recognising the multiple, changing and sometimes conflicting needs that underpin different people's well-being and quality of life. Seek inspiration for your planning in the polyphony of music, a controlled diversity where every theme has its place: both the flamboyant motifs and the dull backdrops of everyday life. (Hanke P 2022)

2.1 Remember the mental and social needs

There is great focus on movement, cycling and physical activity – and that is good. But if we are to plan for the complexity of factors that affect our well-being, we need to understand well-being holistically as bodily, *social*, *and mental*. Work holistically with social, physical, and mental needs.

Work on the link between the environment and influential parameters in planning that can positively push our actions and behaviours. For example, social and mental needs can be addressed holistically: communities of action foster a sense of social belonging and invite participation in positive communities. This is also important for promoting mental health. (Sundhedsstyrelsen 2022)

2.2 Create space for everyone, the many and the few

Our cities are home to a diversity of people. We are growing in numbers and in differences. A basic premise for the cities of the future is to ensure that all people and social groups are considered and involved. We need to create space for everyone in the city – including those who differ from ourselves. (Andersen RB 2022) This requires an approach that recognises that different population groups in different areas have different needs.

Work strategically with a demographic approach to the development of urban spaces and green areas, addressing needs across age, gender, education level, type

of household, employment, culture, ethnicity, etc. This ensures coherence between the physical environment; residents' needs and public and municipal spaces and services.

3. Demand co-creation

We are fundamentally social beings. Loneliness and social isolation challenge our well-being, and social segregation erodes our empathy and tolerance for those who differ from ourselves. Put social well-being and loneliness on the agenda. Several countries already have a minister for loneliness. (Bredesen JL 2022) The social contexts we live in and our interpersonal interactions with other people make us who we are. Participation and involvement in communities, belonging, trust in others and safety are all parameters of social well-being.

3.1 Prioritise the social architecture of the place – no one can create communities alone

Continuously prepare the ground for communities to grow. We need to prioritise the social initiatives – even after the physical project is completed. One way is to work with social hosts and urban hosts to facilitate communities.

Create citizen-driven initiatives, such as cultural centres and cultural spaces, where volunteers can work as hosts introducing and building bridges between people using the space and ensuring that everyone is invited into the community. Hosts can welcome people and support users' needs and introduce them to other users – in other words, make it easy to join communities. (Winther K 2022) Strong local driving forces or a strong volunteer organisation can secure the hosting of communities.

3.2 Create communities of action and strengthen co-creation

Resident-driven communities around shared interests can bridge cultural and ethnic divides in residential areas, promoting social well-being and empowerment. This strengthens social cohesion and resilience. Initiating and sustaining activities requires strong local driving forces: Give local sports clubs, leisure activities,

interest-based clubs, and associations a place in city spaces as catalysts for strong, inclusive communities that address loneliness. (Peschardt KK, Henningsen B 2022)

Realise innovative social interventions based on common interests and facilitate communities of action: places that engage individuals and groups in creating something concrete together, such as developing local products. (Winther K 2022) Examples might be a baking pavilion that brings people together around different baking traditions or more practical communities around growing gardens, making ceramics or repairing bikes. It is fundamental to ensure openness as to who can participate in the co-creation.

3.3 Reinforce the temporary and create space for the unplanned

Spaces for various spontaneous activities that attract a diversity of people, strengthen social life and encounters across differences. The meeting of different users is the prerequisite for tolerance: According to Richard Sennett, encounters with "the strange" create a breeding ground for tolerance between different users of urban space. (Juul H 2009)

Create spaces that can be freely reprogrammed for temporary use and occupied by all for self-organised activities. Spontaneity intensifies urban life and gives ownership to the urban space, it creates eyes on the street and can increase safety, which strengthens social and mental well-being.

Address the city's need for complementary social and cultural venues. There must be urban spaces for everyone, but not all urban spaces must be for everyone.

4. Use urban nature as an active resource

Green urban environments improve health, well-being, and quality of life. Fatigue, negative stress, and irritation increase the further you live from green spaces. Conversely, spending time in green spaces is linked to lower stress levels and higher well-being, regardless of gender, age, or socioeconomic background. (Skov & landskab, LIFE, University of Copenhagen 2008) Improving access to good green spaces in disadvantaged neighbourhoods helps to address health inequalities. (Braubach M et al 2017)

4.1 Put urban nature on the agenda

Use urban nature and green initiatives as an active resource in urban planning. Parks, green belts, and gardens can invite people to exercise, relax and socialise across social and cultural divides.

Urban nature creates added value: it contributes not only to well-being but also to climate-resilient cities, CO₂ storage, enhanced biodiversity, pleasant urban spaces, and a good microclimate, as well as being able to counter noise and air pollution and increase housing prices.

Make demands on the number of green square metres, the distance to green areas and the number of trees. Use Green Standard 2.0 as inspiration in the preparation of policies and planning documents.³ Work to increase the number of parks and gardens, transform urban roofs into green oases and kitchen gardens, transform grey facades into green and vertical forests, transform asphalt courtyards into natural spaces, promote urban gardens and urban agriculture, and create networks of green corridors linking parts of the city.⁴

4.2 Work with landscape-based infrastructure and hybrid solutions

New solutions are needed to bring more urban nature and biodiversity into our cities. The coordinated work across e.g., mobility and urban space can optimise traffic management and create space for new urban nature. This requires multidisciplinary and cross-sectoral cooperation.

Work on landscape-based infrastructure, where considerations of landscape and mobility are integrated. Prioritise landscape-based mobility plans, integrating planting and urban nature into the construction of roadways, station areas, stops, etc.

Apply hybrid programming to green spaces so that they have more than one function and/or can be used differently throughout the day. For example, work with nature-based climate adaptation that functions as recreational green spaces, movement paths or schoolyards. Or integrate therapy gardens into existing parks and cemeteries where there is a setting for tranquillity.

 ³ See: Presentation for Green Norm 2.0, methods and tools for more and better urban nature, https://thegreencities.eu/wp-content/uploads/2020/02/Gron-Norm-2.0.pdf
⁴ See e.g. Stefano Boeri Architetti's Urban Forestry manifesto for inspiration

4.3 Design safe, peaceful and wild green spaces – all year round

The quality of parks and green spaces matters. Studies show that the combination of the experience characteristics 'safe', 'peaceful', and 'wild' has a strong influence on the health of urban residents. (Skov & landskab, LIFE, University of Copenhagen 2008) In the Nordic countries, it's not always green, but grey, cold, and wet for much of the year. The lack of daylight in winter affects our well-being. Therefore, green spaces need to be designed to promote activity and social life during the winter months.

Design green spaces with different spatial qualities to allow for mental recovery, social gatherings, and physical activity, without running and playing interfering with areas for rest and contemplation.

5. Plan for everyday movement and physical activity

Physical inactivity is a growing problem. Physical activity is well documented to prevent a wide range of common diseases and conditions, including type 2 diabetes and cardiovascular disease. It is estimated that physically inactive people live, on average, approx. seven years less than physically active people. (Sundhedsstyrelsen 2022)

5.1 Mix up the city and pave the way for an active movement culture

Plan for physical activity as a natural part of daily life. (Schipperijn J 2022) In other words: Focus on active living. Mixed use cities promote active living and provide a framework for active transport. This requires a break with the zoned city. Functions must be mixed to encourage new mobility habits and behaviours.

We must ensure access and short distances from home to the destinations and functions we use and visit in our daily lives: This supports movement in everyday life but also the local sense of belonging. Map functions, services, and mobility to ensure accessibility to housing, shopping, jobs, and leisure functions within 800 m in the city or individual district. That's the equivalent of a 20-minute round trip.

Plan attractive, safe, and pedestrian-friendly local environments that invite people of all ages and abilities to choose active transport. Use mobility plans to ensure access to public transport in planning. Ensure people only must travel short

distances to public transport linking urban areas to functions that cannot be located locally, such as hospitals, major educational institutions, etc.

5.2 Create local and social recreational opportunities for all, regardless of background

Access to local recreational facilities and services plays a role in physical activity. Movement and physical activity can create social encounters and communities, helping to build new relationships and cohesion across society. Integrate sport and exercise facilities into their surroundings and make them local meeting places that reach out and invite participation in movement, sports, play, exercise – and community.

Give as many age groups as possible – regardless of social and economic position – the opportunity to be physically active. Open closed facilities to invite more people in, and work with multi-use, hybrid programming and overlap between activities to bring people together across generations.

Think beyond the needs of the athlete and look at local needs and habits. There must be a link between the needs of residents and public recreational facilities and municipal sports facilities. Make the local situation the starting point. (Andersen RB 2022)

6. Build on theory and knowledge and invite researchers in

There is plenty of knowledge to draw on! Knowledge that needs to be brought into the real world and can contribute to urban development with impact and effectiveness. Health profiles, research in health promotion and prevention, research in how health design and nature-based therapy can be applied in practice and research in how to integrate physical activity into everyday actions creates an active everyday life and healthier lifestyles are all knowledge we can put to use. Invite the researchers in.

6.1 Use theory as inspiration for innovation

Urban theories can inspire the development of new approaches to anchoring wellbeing and health planning and thereby change our behaviour in urban spaces.

Use urban theory as a framework for analysis to understand challenges and to find inspiration for innovative solutions. Draw on theory from different disciplines and include conflicting viewpoints that can challenge and inspire the project's thinking and analysis.

6.2 Get the hard facts on the table to ensure political prioritisation

Health profiles and safety surveys are just a part of the knowledge that can be drawn on in health promotion planning. Use these to raise awareness of challenges and potentials. What is the impact of the choices we make? Get the facts on the table. Draw on knowledge from relevant studies to raise awareness and political priority for both challenges and impact of initiatives.

6.3 Invite researchers in – from start to evaluation

Extensive research is being carried out on the influence of the physical environment on our well-being and health promotion and prevention. But there is a need to bridge the gap between research and practice.

Involve researchers from the start of the project so that they can contribute to the development of the project as well as the process and evaluation of impacts. Researchers can support projects with knowledge of what works and ensure that follow-up research, evaluation and impact measurement of interventions can be carried out.

6.4 Set up an independent council and get a "second opinion"

Open the professional discussion: Invite independent and impartial experts into the development. Set up independent expert groups, councils, or committees to ensure a holistic, cross-disciplinary focus across urban development, sustainability, and well-being. They can be academics, policy makers and representatives from community initiatives that bring together experience from both the public and private sectors. Together, they can provide support, advice, criticism, and expertise on the built environment.

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