



RESTORATIVE CONDENSER

DESIGNING FOR EVERYDAY MENTAL WELL-BEING



introduction

Mental well-being has increasingly become an open topic of conversation, particularly with the societal shifts brought about by social media, digital interactions, and the COVID-19 pandemic. These developments have enhanced virtual connectivity but also led to a growing sense of disconnection in real life, impacting mental well-being. Constant digital engagement lacks the depth of in-person interactions, often leaving individuals feeling isolated despite frequent online connections. Compounding this issue is the decline of “third places” - informal gathering spaces outside of work and home that foster social connection. While previous generations had more access to these spaces, they are now less common, especially for younger people

In Copenhagen, Denmark, mental well-being statistics show worrying trends: 40% of people aged 16 to 44 report high levels of stress (Statistics Denmark, 2022), and 25% suffer from low mental health and anxiety (Statistics Denmark, 2022) as shown in figure 01. In a city otherwise known for its happiness and quality of life, these figures are surprising and show a need for interventions that address social disconnection and mental well-being. These figures highlight a critical need for environments that actively support well-being and encourage genuine social connection. This project responds to this need by reimagining the “third place” as a restorative public building that fosters mental well-being through carefully designed themes that stimulate connection, relaxation, and engagement.

This project is a restorative public building that serves as a third place designed to enhance mental well-being through six themes: blue (water elements), green (vegetation), sensory (multi-sensory engagement), active (encouraging movement), playability (interactive features), and inclusivity (accessible design). Each theme addresses aspects of mental well-being and some of those aspects are mentioned below:

- **Blue** spaces and **greenery** create calming environments that reduce stress (Roe & McCay, 2021).
- **Sensory** design enhances comfort and connection by engaging multiple senses (Roe & McCay, 2021).
- **Active** design promotes physical activity, supporting mood and cognitive health (Roe & McCay, 2021).
- **Playability** introduces joy and spontaneous interactions, fostering social connection (Roe & McCay, 2021).
- **Inclusivity** ensures accessibility, creating a welcoming space for all (Roe & McCay, 2021).

Together, these themes aim to create an environment that encourages social connection and supports mental well-being.

The central research question guiding this study is:

How can architectural design, incorporating blue, green, active, playable, sensory, and inclusive themes, be implemented to positively influence mental well-being in public spaces?

¹Third place. (2024, October 3). In Wikipedia. https://en.wikipedia.org/wiki/Third_place

Roe, J., & McCay, L. (2021). Restorative cities: Urban design for mental health and wellbeing. Bloomsbury Visual Arts.

Supporting sub-questions include:

- How do blue spaces and greenery features influence emotional responses and reduce stress?
- How do sensory elements (e.g., visual, auditory, tactile) shape emotional responses in public spaces?
- How can active design elements foster social interaction and cognitive well-being?
- What role do playability and inclusivity play in reducing isolation and building social connections?

By answering these questions, this project aims to show how architecture can enhance mental well-being by structuring sensory, physical, and social experiences. By integrating the six themes into a public building, the project contributes to the discourse on architecture's role in supporting mental well-being and social connectivity, emphasizing architecture as a tool for promoting a balanced, restorative urban life.

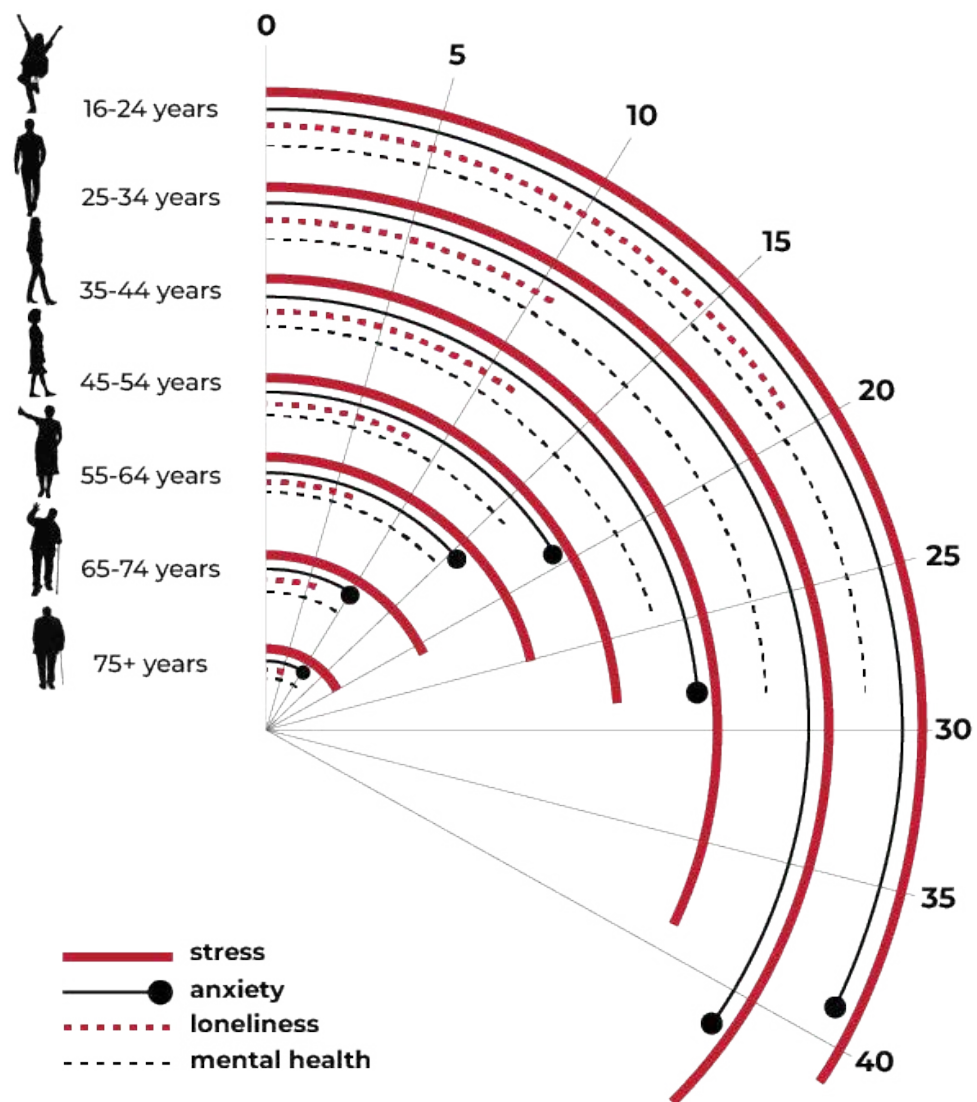
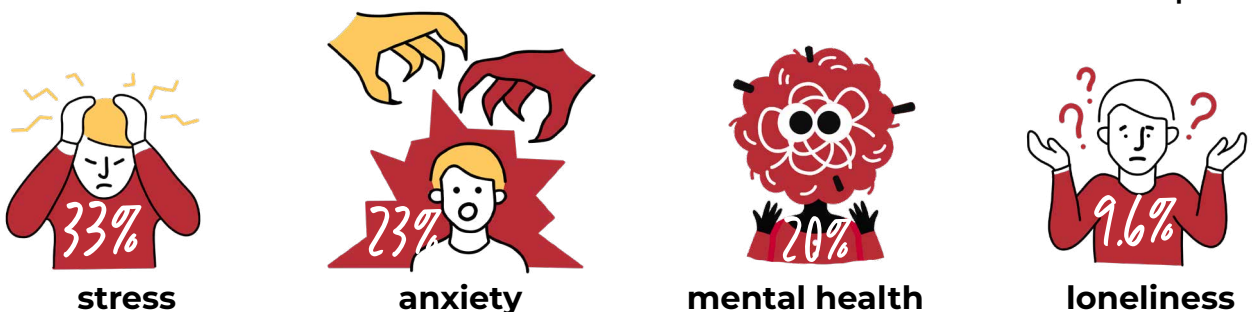


figure 01: mental health statistics in Copenhagen



key terms, concepts, & theories

This project explores how architectural design can enhance mental well-being by blending architecture and psychology. Architecture has the power to shape people's perceptions, emotions, and interactions within a space, and insights from psychology inform how specific design elements impact emotional states. By combining these fields, the project investigates how the built environment can promote relaxation, reduce stress, and foster social connection. The design approach is structured around six key themes-blue, green, active, playable, sensory, and inclusive- each contributing to well-being across three interconnected scales:

1. Environmental Scale: Begins with the building's location and surroundings, integrating the themes to create a calming atmosphere and connect occupants with nature. The building's form bridges the environmental and spatial scales, setting the stage for spatial organization.

2. Spatial Scale: This scale focuses on the building's layout, with each theme applied to encourage movement, accessibility, and interaction. It emphasizes how the layout supports social engagement, accessibility, and active design.

3. User Scale: At the most detailed level, the user-centered scale focuses on the human experience within the building. Here, all themes play a crucial role, especially sensory design, which directly impacts how occupants perceive and feel in the space. This scale prioritizes creating a supportive, nurturing environment tailored to the occupant's well-being.

This layered approach allows for a comprehensive investigation of how architecture shapes perception and influences user's mental well-being at different scales, from the building's external presence to the intimate experiences of its occupants.

methods & methodology

This research employs a **qualitative approach** to explore how the six design themes- blue, green, active, playable, sensory, and inclusive- impact occupants' perceptions, emotions, and overall well-being. The following methods will be used:

- **Observational Studies:**

Observing how people interact with spaces that incorporate these themes- such as libraries, wellness centers, and parks- will provide insights into how those elements affect emotions and perceptions. These observations will reveal how specific features, such as

natural light, interactive spaces, and inclusive design, influence occupants' experiences.

- **Case Studies:**

Analysis of buildings designed with those themes, such as community centers and public libraries, will show effective design strategies that foster positive perceptions and emotional regulation.

- **Literature Review:**

Key books like *Restorative Cities*, *The Architecture of Happiness*, and *Sensory Design* will provide a theoretical foundation, contextualizing how those themes, when implemented into the design, enhance mental well-being and identifying gaps that this research will address.

These methods offer a comprehensive approach: observational studies provide real-time insights into behavior, case studies demonstrate practical applications, and the literature review connects these findings to established theoretical frameworks. Together, these methods allow for an in-depth exploration of how the six themes influence perception and emotional responses, ultimately enhancing mental well-being.

conclusion, choices, & design strategies

This project shows how architecture, by integrating psychological insights and design principles, can enhance mental well-being. By focusing on six key themes—blue, green, active, playable, sensory, and inclusive- across three scales (environmental, spatial, and user-centered), the research shows how thoughtful design can shape perceptions, foster relaxation, and encourage social connection.

Through a qualitative approach combining observational studies, case studies, and a literature review, this study reveals how each theme contributes to creating supportive environments that positively influence emotions. These findings will highlight architecture's potential to address mental well-being needs, offering a framework that enhances daily experiences in public buildings and supports healthier, more connected communities.

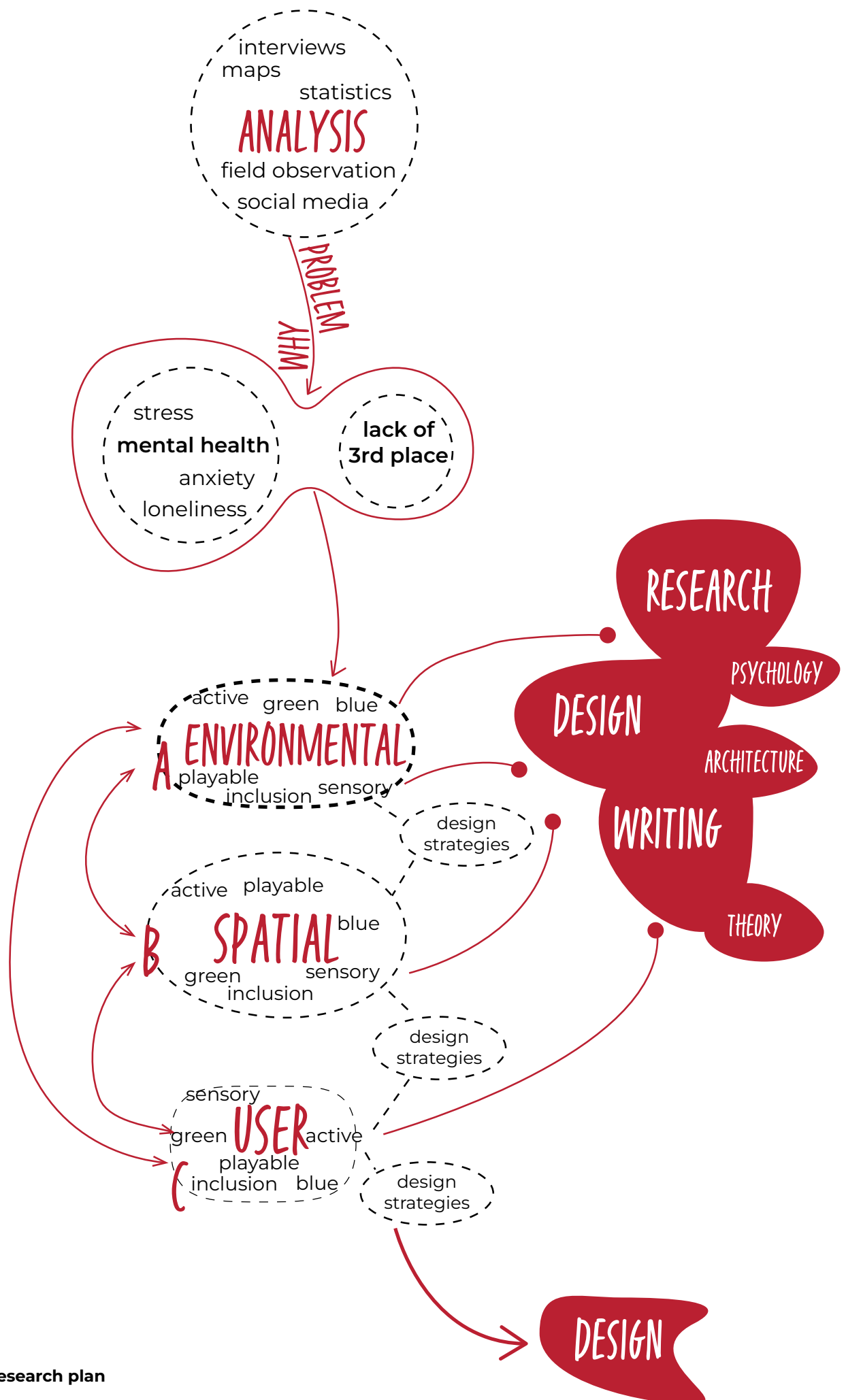


figure 02: research plan

annotated bibliography

Restorative cities

urban design for mental health & well-being

book by Jenny Roe & Layla McCay

This book examines how urban design can support mental health and well-being, focusing on sensory engagement and how various environmental features (e.g., green spaces, noise control, natural light) can reduce stress and promote emotional well-being.

01

Sensory Design

book by Joy Monice Malnar & Frank Vodvarka

This book delves deeply into how the five senses—sight, sound, touch, smell, and taste—interact with architectural spaces. It explores how designers can intentionally engage these senses to create environments that positively influence perceptions and emotional responses.

02

Architecture of Happiness

book by Alain de Botton

This book explores how architecture affects emotions and well-being, arguing that the design of buildings has a profound influence on our happiness and satisfaction. De Botton explains how visual aesthetics and sensory experiences shape our perceptions of space and how well-designed environments can promote a sense of belonging and well-being.

03

Biophilic Design

Book by Steephenn R. Kellert, Judith Heerwagen, & Martin Mador

Focused on the biophilic approach to architecture, this book discusses how integrating nature into design can reduce stress and promote mental well-being

04