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RESEARCH PLAN

RESEARCH ON THE
DEVELOPMENT OF A
MULTIGENERATIONAL
HOUSING COMMUNITY

Designing for Care in an Inclusive Environment
AR3AD10 - MSc 3 Graduation Studio

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PROBLEM STATEMENT

The growing population and the widespread desire for a comfortable life often promote individualism and reduce social cohesion, as people prioritize personal interests over community well-being. In Rotterdam, where 49.3% of households consist of just one person, meaningful social interaction often requires a deliberate effort (Gemeente Rotterdam, n.d.). Yet, as individualism grows, forming connections becomes increasingly difficult. This weakens social bonds and trust, reducing mutual support and leading to greater isolation, inequality, and division—creating a cycle of fragmentation that undermines collective progress. Caring for others has always been close to my heart. The idea that a small gesture can have a big impact on someone else brings a sense of joy that everyone should experience.

Loneliness is often associated only with the elderly, but it affects all of society. Being alone while needing a bit of help can lead to hiring a professional, even though a neighbor could easily assist. What could be a small gesture then becomes a ‘big operation’. One example of addressing this is done by the organization Knarrenhof, which creates multigenerational housing communities, known as ‘Meergeneratiehofjes’. While primarily for people aged 45 and older, Knarrenhof also reserves space for up to two younger residents. These younger adults, along with older seniors and the elderly, live together in vibrant communities where neighbors provide support when needed—fostering attention and connection rather than formal care (Knarrenhof, 2024). According to an NPO Radio 1 interview, there is (already) a waitlist for this type of housing with 37.000 people, resulting in a wait of three to four years (NPO Radio 1, 2023). This waitlist highlights the growing need for a little more attention to one another while maintaining independence.

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RESEARCH SUBJECT

The research focuses on the role of multigenerational housing communities and their architectural design in promoting social cohesion and reducing isolation. It aims to investigate how housing models, through thoughtful architectural features and shared spaces, can bring different generations together to address the growing issue of social isolation and individualism. These communities, like Knarrenhof's 'Meergeneratiehofjes', offer a living environment where older adults, younger seniors, and families coexist and actively interact, supported by architectural elements that encourage this connection.

The research explores how architectural design and community structure strengthen social bonds by fostering daily interactions, encouraging informal neighborly support, and reducing the need for professional services often required in traditional, more isolated housing settings. By focusing on the relational dynamics shaped by these environments, the study highlights how the design facilitates mutual assistance, emotional support, and a sense of belonging among residents of different ages.

Additionally, the research assesses how these communities balance the need for independence with the benefits of social interdependence. It analyzes how living in a community where small gestures of attention and care are commonplace reduces the burden on external caregiving (systems) while maintaining the residents' autonomy.

Ultimately, the research aims to evaluate the potential of a multigenerational housing concept, enhanced by thoughtful architecture, as a solution to address wider societal challenges like social fragmentation, professionalized care dependency, and intergenerational disconnect.

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THEORETICAL FRAMEWORK

Emphasizing the importance of inclusive public spaces for fostering healthy communities highlights the critical role that well-designed, accessible environments play in enhancing physical, social, and mental well-being. Inclusive design focuses on creating environments that accommodate individuals of all ages, abilities, and socioeconomic backgrounds. Public spaces—such as parks, plazas, sidewalks, and community centers—serve as vital places where people from diverse backgrounds can interact, exercise, relax, and participate in civic activities. When designed inclusively, these spaces promote universal access and foster healthier, more connected communities (Gardner et al., 2018).

Building on this concept, the Inclusive Healthy Places Framework by Gardner et al. (2018) part of the Gehl Institute—focused on building a global policy movement supporting the goal of people-first cities—offers a structured approach for evaluating and creating public spaces that promote health equity. Synthesizing research from public health, urban planning, and design, the framework addresses social determinants of health through the lens of public spaces. However, this framework's principles should extend beyond traditional public spaces alone. By applying these concepts to direct living environments public spaces become integrated into the fabric of daily life, transforming shared living environments into places of interaction and support.

Co-housing and multigenerational housing models are prime examples of how inclusive design principles can be seamlessly integrated into daily life. In *Together Towards Collaborative Living*, Czischke et al. (2023)—comprising an urban housing specialist, anthropologists, and an architect—advocate for shared spaces and collective decision-making as essential for fostering a sense of belonging and ownership.

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Ruiu (2015)—an urban and environmental sociology lecturer at Northumbria University—expands on this by exploring how co-housing generates social capital, promoting collaboration, strong social ties, and the integration of residents into the broader community.

Expanding on this approach, Intergenerational Housing: The Case of Humanitas Netherlands by Arentshorst et al. (2019)—which includes a researcher specializing in age-friendly homes and neighborhoods, a policy maker and project leader in the care system, and a professor focused on population aging—emphasizes the significance of intergenerational housing as a solution to the challenges posed by aging populations. The study illustrates how nurturing relationships between elderly individuals and younger generations help reduce social isolation, thereby enhancing the quality of life for everyone involved. It fosters mutual support and a sense of community while providing sustainable, equitable solutions to demographic challenges, making it a promising approach for future housing policies.

Together, these sources and different perspectives create a comprehensive framework illustrating how inclusive design and collaborative living can transform public and private spaces into vibrant, supportive communities. They collectively emphasize the importance of creating environments that enhance residents' well-being and social cohesion while addressing key societal challenges.

This research *hypothesizes* that multigenerational housing communities can enhance social cohesion by integrating diverse age groups into shared living environments, fostering daily interactions and mutual support, and ultimately balancing independence with social interdependence.

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RESEARCH QUESTION

To effectively explore the complex role of multigenerational housing communities in fostering social cohesion, the following research question is proposed:

“Can a multigenerational housing community concept promote social cohesion, in for example the Tarwewijk?”

SUB-QUESTIONS

A set of research sub-questions has been developed to delve deeper into the necessary background information, ultimately aiming to identify suitable solutions for the identified challenges. The sub-questions are as follows:

1. What architectural features and shared spaces encourage social interaction between different generations in multigenerational housing?
2. How can a housing community balance privacy with communal spaces, and how does this affect residents' well-being?
3. What housing types and amenities can meet the diverse social needs of multigenerational residents while fostering understanding between generations?
4. What design insights from existing multigenerational projects can be used to improve social cohesion in future housing developments?

THEORETICAL DEFINITIONS

Key terms from the research question are defined or clarified to facilitate more focused research.

Multigenerational housing

As defined by AARP (2023)—an organization advocating for the priorities of older Americans—*multigenerational housing* refers to living arrangements where people from different generations, whether related or not, live together. This can be within the same household, in a shared residential building, or within the same neighborhood. Ideally, multigenerational housing fosters opportunities for meaningful interaction and engagement across age groups, promoting social connections and support beyond physical proximity only.

Community

Based on the (sub)definitions from the Merriam-Webster Dictionary (2024), the term *community* is defined as a unified body of individuals who share common interests, characteristics, or goals. This can encompass people living in a specific area, a group bound by shared values or activities within a larger society, or individuals connected by a common social, economic, or political interest.

Concept

According to Sen (2023), a *concept* is a thought, idea, or notion that forms the foundation of a design project and acts as the driving force that propels it forward. It embodies the power and identity of the architectural project's development and is regularly referenced and consulted at every stage of the design process. It can be described as an idea, thought, abstraction, philosophy, belief, inspiration, intention, theory, or hypothesis, forming the essential core that shapes and guides the creative and functional direction of a project.

Social cohesion

As described in the Encyclopedia of Quality of Life and Well-Being Research, *social cohesion* refers to the level of connectedness and solidarity among groups in society. It encompasses a sense of belonging within a community and strong relationships among its members. This process seeks to unite diverse individuals by reducing inequality and socioeconomic disparities. It addresses the people's needs for personal development and belonging, linking individual freedom with social justice while promoting fair resource sharing and common rules for conflict resolution (Manca, 2014).

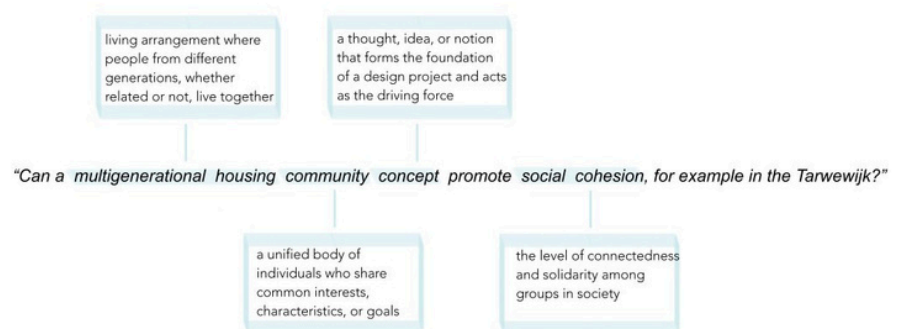


Figure 1. Research question with definitions diagram

Social isolation

Social isolation is defined as the lack of social interactions, connections, and relationships with family, friends, neighbors, and the broader community or society. It encompasses both individual-level disconnection and a broader sense of detachment from societal engagement (Berg & Cassells, 1992).

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Intergenerational vs multigenerational

Villar (2007) explores the distinction between the terms and clarifies this distinction. According to him, the term *intergenerational* refers to the involvement of members from two or more generations in activities that foster awareness of different perspectives. It emphasizes increasing interaction and cooperation to achieve common goals, highlighting mutual influence and the potential for positive change. In contrast, *multigenerational* is used in a broader context, referring to shared activities or characteristics among generations without necessarily implying interaction or influence. In academic research, a study can be classified as multigenerational if participants come from different generations. However, it is considered intergenerational only if it focuses on the mutual influence among these generations and how such interactions can alter beliefs, attitudes, behaviors, and material circumstances.

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SCOPE

The research will focus on how key architectural elements in multigenerational housing communities can foster social cohesion. It will explore design features, housing layouts, and shared spaces that encourage interaction between generations. The study will also examine how these communities balance individual privacy with communal spaces, assessing the impact on residents' well-being and autonomy. Additionally, it will analyze how different housing types and amenities address the physical, social, and emotional needs of multigenerational residents while promoting intergenerational understanding. Lessons from successful and unsuccessful projects will be drawn to inform the development of a multigenerational housing concept.

The study will focus on case studies of multigenerational communities that integrate independent housing units with communal spaces, encourage social interaction across age groups, and balance independence and social support. Co-housing models, where residents of all ages participate in community management, will also be included.

Excluded from the research are non-architectural factors, such as cultural or economic influences, unless they directly relate to the built environment. The study will not focus on individual behavioral studies, elderly care facilities, single-generation housing, or housing without communal spaces. Long-term impacts of multigenerational living will be reviewed through existing literature, but no longitudinal studies will be conducted.

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METHODOLOGY

To address the research question and sub-questions, a comprehensive research methodology is defined. It integrates literature research, site analysis and mapping, quantitative research, and case studies. This approach aims to identify suitable solutions for the challenges of multigenerational housing.

Literature Research

Analyze existing studies to identify architectural features and shared spaces that foster intergenerational interaction, as well as explore theories on balancing privacy with communal areas and their impact on residents' well-being. It will provide insights into housing types and amenities that meet the diverse social needs of multigenerational residents and promote intergenerational understanding.

Site Analysis and Mapping

Through site analysis and mapping, the dynamics of multigenerational housing communities can be visualized. By analyzing the physical layout, key architectural features that facilitate interaction can be identified, revealing how residents move through and congregate in spaces. By visualizing the flow of movement and usage patterns at different times of the day, it's possible to understand how design influences social interactions and fosters a sense of community. Additionally, it determines the spatial arrangement and distances between private and communal areas, providing a breakdown of privacy zones versus shared spaces. Mapping also allows for an analysis of how the composition of housing types and amenities caters to the diverse needs of various age groups and household sizes, enhancing overall community cohesion.

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Quantitative Research

Through interviews, fieldwork, and observations, the study will explore the impact of architectural features and shared spaces on intergenerational interaction. Feedback from residents will assess how the balance between privacy and communal areas influences their well-being. It will also help identify which housing types and amenities best meet the needs of multigenerational residents while promoting intergenerational understanding. Additionally, visiting these residents and observing their daily lives will provide valuable insights from real-life examples.

Case Studies

Analyze real-world examples of multigenerational housing, focusing on practical examples of how architectural features and shared spaces encourage intergenerational interaction. Determine and illustrate the balance between privacy and communal spaces and their impact on well-being, and reveal which housing types and amenities successfully meet residents' diverse needs while fostering intergenerational connections. The cases will offer concrete lessons and critiques to inform future design strategies for enhancing social cohesion in a multigenerational housing community.

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RESEARCH OUTPUT

The output of the research will be *design guidelines* for shaping a multigenerational housing community concept in Tarwewijk, Rotterdam. These guidelines will address various spatial scales—neighborhood, building design, and individual homes—organized by their role in fostering social cohesion.

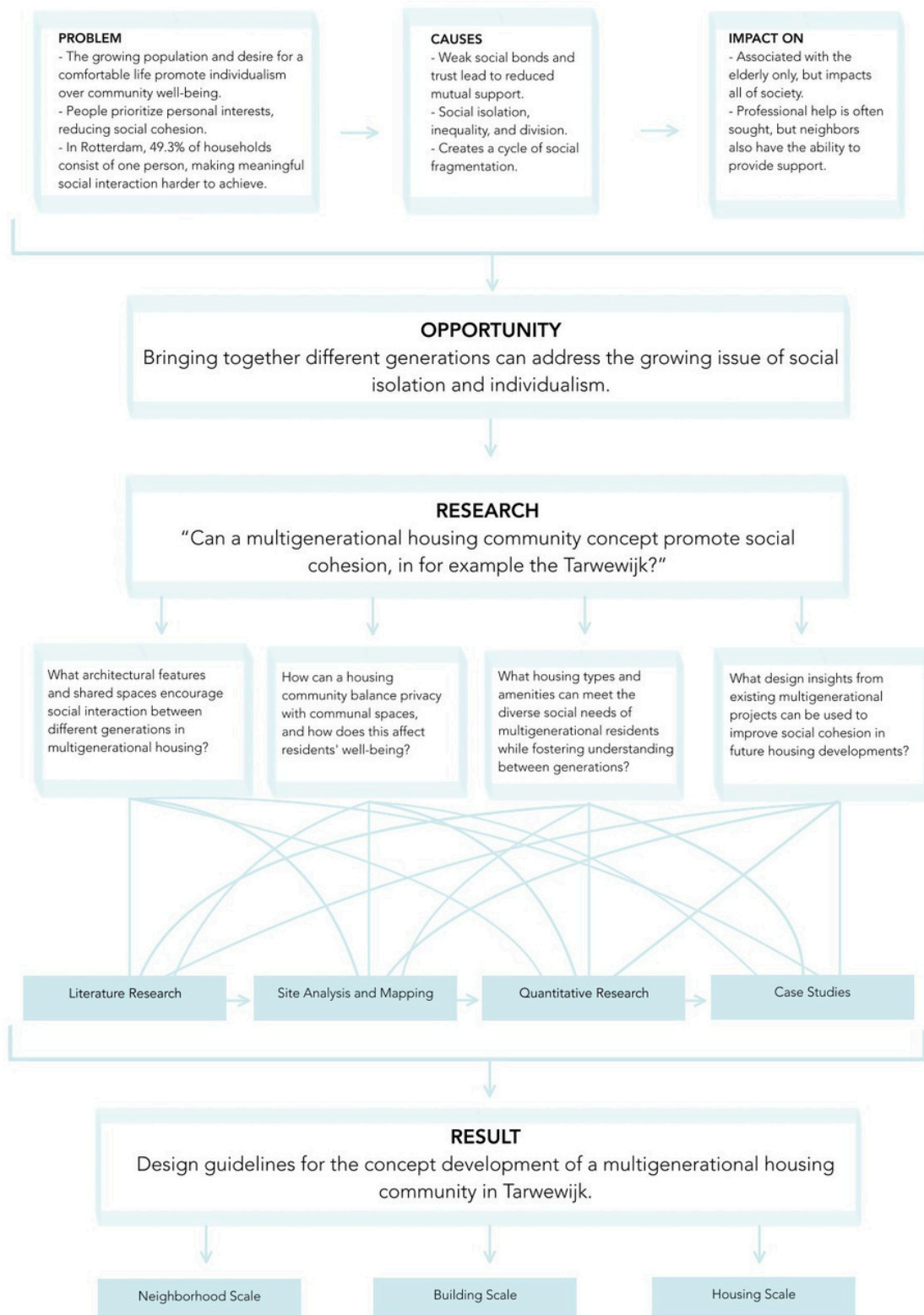
At the *neighborhood scale*, the guidelines will emphasize shared public spaces that encourage daily interactions between residents of all ages. These spaces will focus on creating meaningful connections between the diverse inhabitants of Tarwewijk, ensuring the community remains accessible and welcoming to all generations.

At the *building scale*, the design will promote interconnectedness while maintaining a balance between community and privacy. This will include communal spaces that encourage informal social encounters, while offering diverse housing units tailored to accommodate varying family sizes and generational needs, ensuring inclusivity for all life stages.

At the *housing scale*, homes will be designed to meet the needs of families of different sizes and ages. The layout will encourage interaction but also provide spaces for solitude and reflection, recognizing the importance of balancing social engagement with personal privacy for overall well-being.

These guidelines are rooted in the belief that architecture plays a key role in promoting or inhibiting social cohesion. They offer a structured approach to create environments that nurture belonging and support. Prioritizing flexibility, accessibility, and inclusivity, the guidelines provide a comprehensive approach to multigenerational living, addressing the complexities of building strong, interdependent communities while maintaining individual autonomy.

RESEARCH DIAGRAM



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