

THE SHELTERED INDEPENDENT LIVING ATLAS

Cocreating a decision-making tool with the professional field¹

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Abstract

Housing for the elderly in the Netherlands is changing constantly. Residents of care homes are housed in sheltered independent living or more preferably, in areas with integrated neighbourhood services. The physical scale of sheltered independent living and its effect on social quality of housing have not been explored. Initiators decide on the basis of previous experiences, intuition and good intentions, guided by policy and focused on exploitation, but almost without any scientific basis.

In a PhD research 265 projects were studied in a desk study and 24 projects in a case study. The aim is to contribute to a more informed and evidence-based assessment among initiators.

In the spring of 2014 the Sheltered Independent Living Atlas will be developed with the professional field and, for upcoming professionals, with the educational field commissioned by the Centre of Expertise Social Transition for Rural Areas of the HAN University of Applied Sciences.

Keywords

Sheltered independent living, Decision making, Physical scale, Group Mix, Social Quality of Housing

Introduction

Housing for the elderly in the Netherlands is changing constantly. Once-valued homes for the elderly have been replaced by care homes and nursing homes (van der Voordt & Terpstra, 1995). These homes have subsequently been replaced by small-scale housing facilities (Boekhorst et al. 2008). And the residents of care homes are housed in sheltered independent living or more preferably, in areas with integrated neighbourhood services (Edwards, 2001). The goal: independent living for longer.

The latest research on sheltered independent living dates from 2005 (Singelenberg, 2005). It is considered out of date as a form of housing and exhausted as a subject for research. Nevertheless, they are still being built, changing in character, intended for a wider variety of target groups, resulting in lighter and heavier versions of the concept (Singelenberg & Triest, 2009). Present definitions should be widened. The question is whether a wider group mix leads to more integration and a better social quality of housing? Small-scale living has already been researched within the field of care for people with dementia (Hamel, 2005; van Liempd, Hoekstra, Jans, Huibers, & van Oel 2010). Findings lead to a revaluation, and at the same time administrative measures are taken. Objections arise as well (Geelen, 2005). The physical scale of Sheltered Independent Living and its effect on housing quality have not been explored. Initiators decide on the basis of previous experiences, intuition and good intentions, guided by policy and focused on exploitation.

Decisions can scarcely be taken on the basis of general literature about the social quality of housing, as this seems to be lacking since 1990. Changing government involvement, less control and more

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customer orientation are possible causes. With new initiatives in which a number of target groups are deliberately mixed and facilities are strongly developed, decision-makers aim to improve the social quality of housing and improve integration, but almost without any scientific basis.

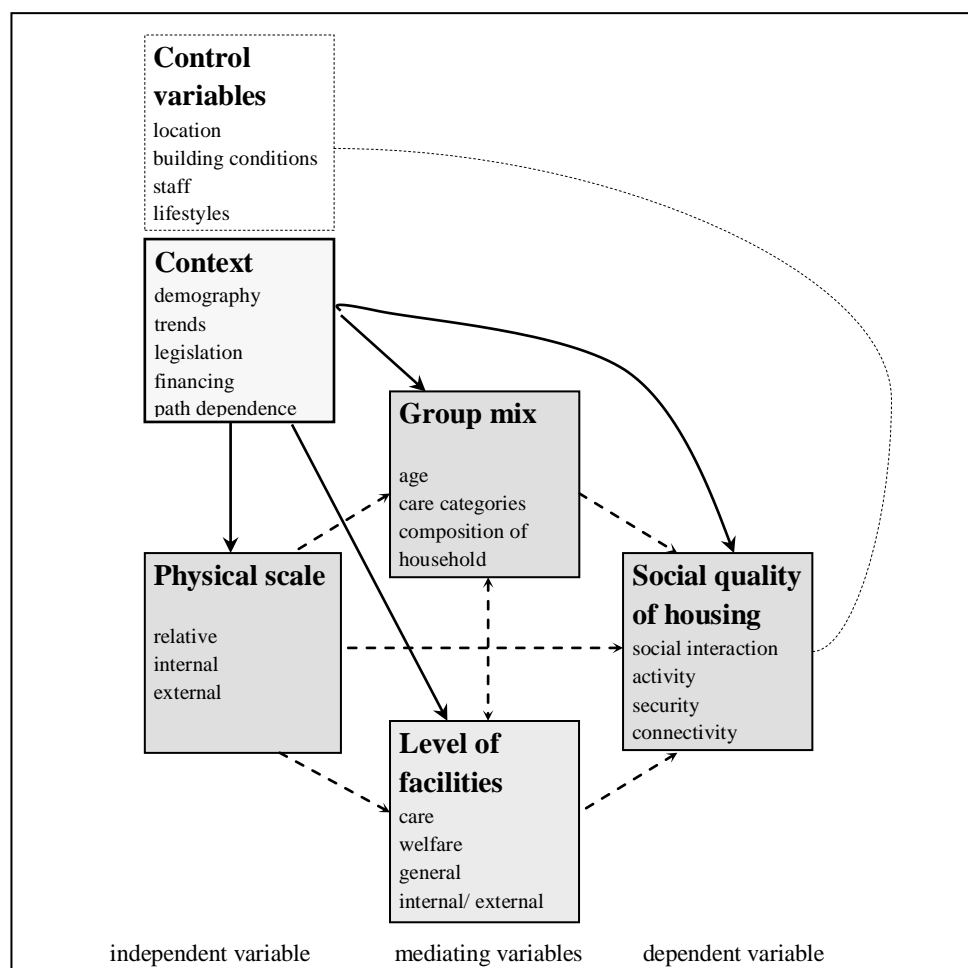


Figure 1. Conceptual model

This paper concentrates on the results regarding decision-making and the recommendation to develop a decision-making tool based on those results.

Methods

An extensive literature review with regard to the notion of scale in organizational theory produced a composition in the independent variable physical scale, the structural scale and the mental scale (van Zijp, 1997). This relates to concepts of scale derived from architectural theory that distinguish external, relative and internal scales (Boudon, 1978; Ching, 1979). In addition, the dependent variable social quality of living has been studied (Van der Voordt, 2009; Alexander, 1979; Zwart, 1989; De Vreeze, 1987). In a preliminary study, thirteen locations were examined briefly to define the research question and explore the field. The first findings were: several very large-scale complexes with respect to the surrounding area of coverage, some facilities closed within a year, wide variety in terms of liveliness and calmness, leading to a first conceptual model.

Mixed method

This research provides insight into the effect of physical scale on the social quality of housing. It consists of a desk study of 265 projects and a case study of 24 projects. The aim is to contribute to a

more informed and evidence-based assessment among initiators. For this purpose, the results will appear in a hard copy and an online atlas after the thesis has been completed.

The desk research on the basis of the CBZ archive (CBZ, 1998-2010). and the Assisted Living Facilities databank of the Expertise Centre Housing and Care (KCWZ, 2010) database shows the relationships between physical scale, target group mixture and level of facilities, and the relationship with legislation and funding during the research period. Both databases are controlled, filtered according to the research question, and analysed for associations and significance of correlations.

The multiple case study shows the influence of the variation found in physical scale, group mix, and level of facilities and the experience of social quality of living on the basis of a strategic selection of 24 cases from the desk research.

To this end, semi-structured interviews were conducted with 174 inhabitants, 40 professionals and 35 decision-making employees in sheltered independent living projects according to an intensive narrative research method (Van Biene 2008). In addition, the research team conducted 171 observations for triangulation of the primary narrative results.

The narratives are arranged in sets of cases according to the research variables of physical scale, group mix and amenity level in order to conduct not only a qualitative but also a quantitative analysis according to the Qualitative Comparative Analysis method (Ragin & Rihoux, 2008; Wagemann & Schneider, 2010).

All fourteen hypotheses were tested using this broad, combined approach. Of those, eight hypotheses were supported, five hypotheses were nuanced, and one was partly rejected. In addition, the exploratory method of data collecting provided eight meaningful conclusions.

Methodological reflection

The strategic selection regarding physical scale succeeded broadly. All three sets of physical scale (small, medium, large) were adequately represented in the sample in order to meet current requirements for a theoretical and practical saturation. However, attempts to find sufficient cases of less obvious combinations of small physical scale in towns and large physical scale in villages were unsuccessful. The addition of these deviant cases would be of great value for conclusions concerning the influence of physical scale and location.

The relatively balanced number of positive and negative statements could indicate the relatively high reliability of the prevailing narrative method, which generates both positive and negative statements.

With the successful testing of all fourteen hypotheses, this combination of QCA with larger sets of narratives proves to be a potential hypothesis-testing methodology that requires further elaboration in future research. This is appropriate in the development of mixed methods and mixed models of research that combines quantitative and qualitative methods. Besides QCA, 'Big Data' techniques could be considered in exploring rather than testing hypotheses with the narrative data from this study or other studies.

For the professional field, the development of the draft hardcopy and online Sheltered Independent Living Atlas is recommended, much of the work for which has already been carried out. Since the observations are related to individual cases, this material can be incorporated. For further development of the atlas, it is desirable to present a prototype to decision-makers and residents as potential occupants.

Results

The desk research focuses on minor questions and hypotheses concerning the distribution of and relations between physical scale, group mix and level of facilities, and the legislation and funding in the period 1998-2010. The desk research offers quantitative overviews of these independent and mediating research variables related to time, to location and to each other, and thus a picture of the variation in sheltered independent living projects in the period 1998-2010.

The distribution and variation was then the prime consideration in the strategic selection of the case study. For this selection, the KCWZ database was taken as the basis on account of the higher

representative nature of this database for sheltered independent living, the larger time span and the completeness of the data.

The range in physical scale observed is used for classification into scale groups for the strategic selection. The observed correlation with changes in legislation and the larger variation in the city are key to the qualitative analysis of these aspects in the case study.

The striking overrepresentation of projects in the desk research of Mixed With Heavier Care has a parallel with the similar overrepresentation of cases of Mixed With Heavier Care. The increase in mixing and the correlation with changes in legislation and funding is investigated further in the interviews with decision-makers. In addition, the single case Mixed With Heavier Care and Non-Care is in line with the rarity within the desk research.

Regarding the facility level, the most striking observation concerns the overrepresentation of welfare facilities with the Basic Level in villages. This is in contrast to the expectation that complexes in villages could fulfil a centre role.

The strategic selection of the multiple case study regarding the range of physical scale and facility level was successful. The spread of the group mix has a overrepresentation of cases of Mixed With Heavier Care and a single case mixed with heavier care and non-care. This is in line with the representation of the population from the desk research.

The broad narrative analysis has delivered a very large amount of data. This is rich in content, but also complex. For the testing of the hypotheses the cases are arranged in sets, varying according to the three independent and mediating variables. These sets are quantitatively and qualitatively analyzed to provide a combination of Qualitative Comparative Analysis (QCA) and a narrative method.

Due to the specific data per case, the triangulation method of the observations is of limited use for comparing the sets. The source triangulation of the interviews with residents, professionals and decision-makers proved to be valuable owing to the comparison of various perspectives.

The most striking result in general is the finding that, in addition to the social function, ensuring security and belonging is a relatively important function of Sheltered Independent Living for residents.

Regarding decision-making, it was found that institutional drivers such as legislation and funding exert by far the greatest impact on the considerations of decision-makers, and not qualitative drivers such as choices for physical scale, target mixing and facility level, focussed on a certain social quality of living. This is because the institutional drivers are 'hard' and therefore leading, while the qualitative drivers are 'soft' and not based on evidence.

Finally, the findings lead to the conclusion that there is still a very limited role for participation and inclusion in the decision-making process. Residents are often only involved in the implementation of activities within the finished building or, when it concerns the initiation phase, as a brainstorm group for plans already drawn up.

Conclusion and recommendations

The conclusions according to the main question of the PhD research are:

- There are limiting factors of the physical scale towards the social quality of housing in Assisted Living Facilities, directly and indirectly through bandwidths for the optimal value of group mix and the balance between internal and external facility level.
- Given the distribution of preferences of elderly, there is no single optimal value for the physical scale.

The conclusions regarding decision-making are:

- Decision making regarding social quality of housing is mainly led by changes in legislation and funding.
- Changes in legislation and funding did lead to qualitative choices with side-effects that undermine the original concept of Sheltered Independent Living.
- An evidence-based tool can support initiators and possibly residents in decision-making.

- The role of the occupants, the residents, in the decision-making process is marginal, particularly in the initiation phase, while here are opportunities for a more inclusive decision-making process.

Recommendations

The recommendations for the social quality of housing provides the following summary:

- Spread the concept of sheltered independent housing.
- Create flexibility for ongoing changes in housing needs and legislation.
- Transform existing apartment complexes into sheltered independent housing by adding a communal space and a 24-hour care component.

The recommendations for decision-making on social quality of housing provides the following summary:

- Take explicitly the role of director as a municipality in respect of Sheltered Independent Living.
- Provide residents in the initiation phase a participatory role, as well as an initiating role, in the decision-making process. Give extra attention when deviating to underlying principles.
- Use the recommendations for sheltered independent housing and make additional choices for portfolio diversification. In case of deviating give attention to surrounding factors.
- Develop the concept Sheltered Independent Living Atlas with the professional field into a hard copy and online decision-making tool.

The Sheltered Independent Living Atlas

The purpose of the Sheltered Independent Living Atlas is primarily to unlock the research information per case. Apart from that it gives an overview of best practices (Van der Voordt, 1994; Nauta, 2009) and could function as a decision-making tool for new initiatives of sheltered independent housing.

Because of the accessibility and the large amount of visual information the Sheltered Independent Living Atlas is appropriate for the domain of the built environment as well for the domain of care. It is a conversation piece for the various actors from those domains, similar as Areadne (De Kam, 2006) does function for assisted living areas. Through the power of images as maps, plans, photographs and diagrams choices are easier to discuss and ultimately controllable, "If we can imagine, we can manage" (Ache, 2013).

The intended users of the Sheltered Independent Living Atlas are initiators of sheltered housing. Traditionally those are: housing associations, healthcare organizations, and communities; also increasingly commercial promoters and residents. But also policy makers, researchers, and designers can access the tool.

The atlas is available in both hard copy and on-line version and is bilingual in Dutch/English published. Although the projects which were studied are Dutch, it is expected that the conclusions and examples are useful for countries with similar housing and care arrangements, such as Belgium, Germany, Great Britain, and Denmark. To this end, the findings regarding the effects of physical scale, group mix, level of facilities and the social quality of housing is sufficiently generic and not very dependent on time. They are parts of a central quality such as Alexander defined (1979). External influences such as institutional factors and situation determine the final effects. The tool provides basic recipes for designing optimal Sheltered Independent Living with additional choices, underpinned by limitations, optima and vulnerabilities.

The concept hardcopy Sheltered Independent Living Atlas consists of two parts. Part A: Overview, provides a bird's-eye view of the research projects and research findings from the desk research and case study of the doctoral research. Part B: Good, better, best practices, provides the documentation for each of the 24 cases, fully documented including the perceived social quality of housing and arranged in sets of physical size, see Figure 2.

The two opening pages per project present the atmosphere and a street view from the complex as well as a image of the building mass. Also, in a table, the scores of the study variables are presented. In the following four pages visual material of the location, the main floor plans and photo impressions of the most important rooms are presented combined with short explanatory texts on the research findings in Dutch and English.

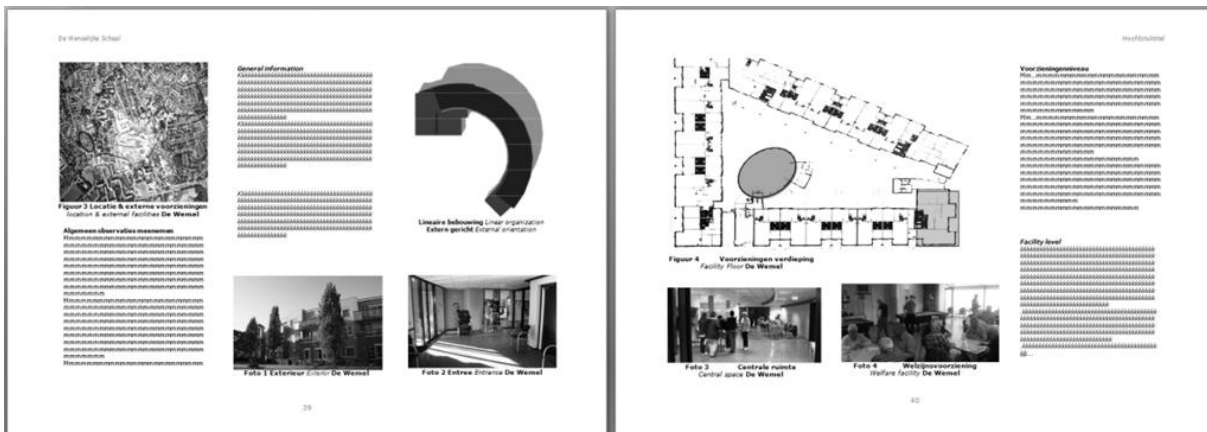


Figure 2 Impression hardcopy Sheltered Independent Living Atlas

The online Sheltered Independent Living Atlas, see Figure 3, is meant as a digital reference and decision-making tool. The idea behind the digital version is that it can be used as a reference book of collected evidence based information or as step by step decision making tool. In that case, global choices for one of the variables for example physical scale are indicated, and minima, maxima, and optima suggestions for the other variables are presented. This can lead to specific recommendations illustrated by narratives, and for matching examples from the case study illustrated with data and illustrative material.



Figure 3 Impression Online Sheltered Independent Living Atlas

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