Scale to fit, physical scale and social quality of housing in sheltered independent living.

Background

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 Once-valued homes for the elderly have been replaced by care homes and nursing homes. These homes have subsequently been replaced by small-scale housing facilities. And the residents of care homes are housed in Assisted Living Facilities (ALFs), or more preferably, in areas with integrated neighbourhood services. The goal: independent living for longer.

The latest research on ALFs dates from 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 It is considered out of date as a form of housing and exhausted as a subject for research.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. 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. Findings lead to a revaluation, and at the same time administrative measures are taken. Objections arise as well. The physical scale of ALFs 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 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.

Main Question

What is the effect of physical scale on the social quality of housing in Assisted Living Facilities, not only directly but also indirectly through the mix of groups and the level of facilities?

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. This relates to concepts of scale derived from architectural theory that distinguish external, relative and internal scales. In addition, the dependent variable social quality of living has been studied and the variables target group mixture and level of facilities have been defined.

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.

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 and KCWZ 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 at ALFs according to an intensive narrative research method. 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.

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.

It is recommended to examine more cases of the interesting, innovative variety of group mix with lower or non-care target groups than the single case of Malburgstaete now included in the study, in part because the inclusion of groups requiring care and groups not requiring care in a single complex is derived from the idea of areas with integrated neighbourhood services on the scale of a single building.

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.

Findings

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 ALFs 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 ALFs, 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 ALFs for residents.

Regarding the influence of physical scale, the variation in the desired scale is surprising, with as many supporters of large scale as of small scale, related to the location in towns or villages.

Regarding the influence of group mix, the most important result is the detectable limit of tolerance between groups, particularly the tolerance of vital elderly towards groups of residents with a mental disability or dementia. This limit seems to be reached much sooner than commonly thought and deployed on the basis of idealistic motives of group mix.

Regarding the influence of the facility level, the main finding is that in a quantitative way activities are only missed at weekends. The qualitative range, however, requires a lot of attention, especially the level of activities, the focus on specific target groups and also non-care target groups and the lack of adequate activities for men as a minority.

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.

Conclusions

The conclusions listed by research variable provide the following summary: Influence of physical scale

- There is an even distribution of physical scale among ALFs in the Netherlands in the period 1998-2010 despite the increased focus on small scale and large scale.
- Smaller ALFs are not relatively more common in villages, and larger complexes are not relatively more common in towns.
- The larger number of inhabitants in cities does not lead to small scale as a result of a broad variety in facilities. The smaller number of inhabitants in villages does not lead to large scale as a result of a concentration in facilities.

- Small scale is valued by inhabitants and decision makers because of the expected domesticity and safety and by decision makers because of the customization possibilities. However, large scale is valued to a similar extent by inhabitants and decision makers for its liveliness, anonymity, choice of contacts and activities.
- The desired scale for the social quality of housing does not differ according to the region in the Netherlands.

Influence of group mix:

- The proportion ALFs with a wider group mix in the population increases, influenced by changes in legislation and funding.
- Target groups with a lighter level of care and physical limitations integrate more than target groups with heavier care needs or learning disabilities.
- A large scale will support a larger, integrated group mix.
- There is a certain range for the optimal value for the group mix regarding the social quality of housing.
- The provision of informal care is low owing to the increased level of care in the complexes, which undermines the concept of sheltered housing.
- Relational aggression is, as in nursing homes, clearly present in ALFs and has a significant impact on the social quality of housing. It is influenced by the group mix.

Influence of level of facilities:

- A high internal facility level has a positive impact on the social quality of housing when there is a low external facility level or a higher level of care. At a high external facility level or a lighter level of care, the empowerment of residents and mixing with the neighbourhood will decline.
- The presence of 24-hour care offers an emphatic desired sense of security.
- The quality of facilities requires more attention than the quantity. There is short of provisions aimed at users with intellectual level and for men. In quantitative terms facilities on weekends are missed. This is especially true for complexes mixed with heavier care.
- In large scale complexes there are relatively less volunteers available, small scale complexes seem to be better embedded in the community.

The power of initiative and ownership of residents in activities is still moderately exploited.

Decision-making on social quality of housing:

- 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 ALFs.
- 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.

Concept sheltered housing:

- In addition to the physical comfort, the expected physical and health-related safety and social interaction are the main reasons to move to an Assisted Living Facility.
- Sheltered housing is, besides aging in a less suitable home or neighbourhood and to be forced to move to an intensive institutional care home, a useful and valuable variant.

Conclusion according to the main question:

- 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.

Recommendations

The recommendations for each variable studied provides the following summary:

Influence of physical scale

- Realize enough vibrancy and viability. Range of lower limit: 25-40 housing units.
- Realize sufficient familiarity and identifiability. Range of upper limit: 300-350 housing units.
- Provide desired balance in social control and anonymity. Range for tipping point: 80-120 housing units.
- Provide for harmonization with location. Range for harmonization with village locations: 25-120 housing units; range for urban locations: 80-350 housing units.

Influence of group mix

- Provide a balanced range for the level of care. Range for lower limit group mix of vital elderly with ZZP2 groups and lower: 30-50%. Range for lower limit group mix of ZZP5 and higher: 10-30%.
- Provide a balanced range for age and vulnerability. Range of lower limit vulnerability profile Vitality: 30-50%.

Influence of level of facilities

- If possible, opt for more external services compared to domestic facilities in order to achieve more mixing with the neighbourhood and to increase the social environment of vital residents.
- Choose for quality of services rather than quantity and choose them with vital elderly, higher intellectual level and men in mind.
- Facilitate resident initiatives by providing a communal space and resources.
- Provide 24-hour care with physical presence of staff

Social quality of housing

- 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.

Decision-making

- Take explicitly the role of director as a municipality in respect of ALFs.
- 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.