

Outdoor Environments at Three Nursing Homes: Focus Group Interviews with Staff

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ABSTRACT. This study investigated how the outdoor environments at nursing homes for older persons were experienced and used to gain knowledge with implications for design. Focus group methodology was used to explore staff's view of how the residents experienced and used the outdoors. Two main themes and ten sub-themes were the result when the focus group interviews were analyzed. Theme one, *being comfortable in the outdoor environment*, describe the residents' special needs to be able to and dare to use the outdoors. The theme suggests a *precautionary design*, which promotes security and safety and protects from disturbance and negative impressions. The second main theme, *access to surrounding life*, describes the residents' needs for change and variety in the everyday situation and suggests an *inspiring design*, which promotes stimulation of senses and mind and provides positive impressions.

KEYWORDS. Elderly, older, outdoor environment, health design, universal design, landscape planning

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INTRODUCTION

Today nursing homes for older persons only accommodate the most fragile persons and very few of them can enjoy the outdoor environment on their own, i.e. they are dependent on the caregivers and next of kin to go outdoors. The positive effects of fresh air, daylight and experience and use of green outdoor environment are well documented (Cohen-Mansfield & Werner, 1998; Küller & Küller 1990; Küller & Wetterberg, 1996; Rodiek, 2002; Ulrich & Parsons, 1992; Ulrich, 1984; Ulrich, 1999) and the health effects arising from experience and use of outdoor environments are greater the more weak and fragile a person is (Ottoosson & Grahn, 1998, 2005; Ulrich, 1999).

One factor influencing older persons' desires and possibilities to go out is the experience of the usability of the environment, i.e. the possibilities to move around, be in and use the environment on equal terms with other citizens (Iwarsson & Ståhl, 2003). The less competent a person is, the greater is the impact of environmental demands on that person (Lawton, 1968), which means that the existence of few environmental barriers supports people with low functional capacity to use the environment. However, the use of the outdoor environment is also a question of how well it provides the users with desirable experiences, i.e. how attractive the environment is. The environment has to be restorative (Kaplan & Kaplan, 1989; Kaplan et al, 1998; Ulrich, 1999, Ulrich, 2001) and instorative (Grahn, 2005; Stigsdotter & Grahn, 2003; Stigsdotter & Grahn, 2002). A restorative environment gives opportunity for recovery, through the restorative experiences *Being away*, *Extent*, *Fascination* and *Compatibility* (Kaplan & Kaplan 1989; Kaplan et al, 1998), or as suggested in Ulrich's theory of supportive gardens (Ulrich, 1999; Ulrich, 2001), a health care facility has the ability to improve health outcomes if it provides the restorative resources *Sense of control and access to privacy*, *Social support*, *Physical movement and exercise* and *Access to nature and other positive distractions*. An instorative environment strengthens our identity and self-esteem and makes us feel part of a meaningful context. When the experiences and activities in the environment are in harmony with the user's background and character health, well-being and drive are promoted (Grahn, 2005; Stigsdotter & Grahn, 2003; Stigsdotter & Grahn, 2002). Whereas the concept of restorativeness focuses on the experiences in an environment that gives opportunity to recover and to improve health outcomes, the concept of instorativeness also adds the possibilities of gaining something more than recovery, something of existential value and reorientation in life that make us more fit to meet future misfortunes.

The knowledge of outdoor environment for older persons is diverse and comprises knowledge about environmental barriers and usability in the public environment (Carlsson, 2004), design issues and guidelines for elderly people's environment in general (Carstens, 1985; Stoneham & Thoday, 1996), but also for the more specific environment at nursing homes (Mc Bride, 1999; Ousset et al. 1998). Several design-related studies of the outdoor environment at nursing homes focus on older persons with dementia (Beckwitt & Gilster, 1997; Cohen-Mansfield & Werner, 1999; Hoover, 1995; Zeisel & Tyson, 1999) and how to use horticulture as therapy (Jarrott & Gigliotti, 2004; Midden & Barnicle 2004; Stein, 1997). Few studies particularly deal with the staff's perspective of the outdoor environment for older persons at nursing homes. Earlier studies on staffs' perspective have focused on older persons with dementia and mainly used quantitative techniques. For example, through questionnaire surveys to personnel, Cohen-Mansfield and Werner (1999) investigated characteristics and features of outdoor areas for people suffering from dementia, and Rappe and Lindén (2004) documented observations regarding indoor and outdoor plants in homes for people suffering from dementia. The understanding of how different environments are experienced and used is

basic for creating attractive and usable environments. The staff's view is of particular importance as they obtain a comprehensive knowledge of the users' wishes, needs and capabilities in the environment. Many nursing homes accommodate people with diverse diagnoses, not only dementia, and therefore it is important to elucidate staff's perspective under these circumstances.

The purpose of this study was to explore factors of importance for the use of the outdoor environment at nursing homes for older persons by asking staff about the residents' use and experience of the outdoors. The study focused on factors with implications for the design and content of the outdoor environment.

METHOD

Focus group methodology (Krueger, 1998) was used to explore the staff's view of how the residents experienced and used the outdoor environment at the three nursing homes. The focus group technique was considered the most suitable since it was the extent of the participants' views that was sought after and not their individual opinions (Morgan, 1998). A focus group discussion is evolutionary in character, meaning that statements and opinions flow from one another (Krueger, 1998). Thus the interplay among the research participants gives rise to richer modulations.

Three cases were used primarily to gain richness and variety in data and to reveal salient points, rather than to lead to concrete comparisons. The data were collected as a part of a case study that aims at describing and triangulating aspects of outdoor environments at three nursing homes for older persons.

Settings

The cases were selected among nursing homes for older persons with access to their own outdoor areas in a city in the south of Sweden. In order to obtain information-rich cases and maximum variation the three cases were purposefully selected. The criteria for variation concerned differences in outdoor design and content, spatial relations (inside building/close surroundings/neighborhood) and location of facility. None of the cases was used systematically for therapy. The main characteristics of the cases are presented in table 1. A detailed description is available in Bengtsson (2004).

Insert Table 1 here

Residents

The residents at the three nursing homes were aged 65 years and above and had physical and/or psychological disabilities that made them dependent on support from caregivers round the clock. Nevertheless, the nursing homes accommodated people with a wide range of functional capacity, from people with cognitive limitations due to dementia and people permanently in their beds due to physical limitations, to the very few who were able to leave the nursing home without assistance using walking aids, wheelchairs, or even by bicycle.

Focus group participants

At each nursing home four to five staff members participated in a focus group. To obtain information rich cases among the research participants, the superintendent at each nursing home was asked to recommend participants among the staff working closely with the

residents and with experience of their use of the outdoors. Altogether 14 research participants were included, all of them women in the age span from 20 to 60 years. They had been working at the three health care facilities from just a few months up to about 20 years.

All research participants joined the study voluntarily and in reported results none could be identified by other situational or contextual factors.

Data collection

The focus group interviews were conducted to give qualitative data through open-ended questions. One moderator and one assistant conducted one focus group interview at each of the three nursing homes in June and July 2004. The moderator guided the discussion in the group and the assistant took notes and asked follow-up questions. The open-ended questions in the general interview guide (Patton, 2002) aimed at exploring and describing the staff's view of the outdoor environment for the residents concerning the experience and use of the outdoors from inside the building, in the close surroundings and in the neighborhood.

Each interview lasted approximately 90 minutes and all of them were tape-recorded. When half of the session had passed a plan of the building and outdoor environment was provided to the group to further support the discussion. The interviews were transcribed shortly afterwards.

Data analysis

The raw data, i.e. transcriptions of focus group interviews, were systematized by the first author into different themes using the analytical approach *Meaning condensation* (Kvale, 1996; Giorgi, 1985). This approach is an empirical phenomenologically based method intended to (1) find natural meaning units in the interview texts, (2) explicate their main themes and (3) relate themes to the purpose of the study. To increase the credibility, the co-author who had not participated in the focus group interviews read the interviews and the authors discussed the themes until they reached agreement.

The main themes are presented with summary descriptions and illustrative quotes. Quotations were abridged and modified to clarify their content and then translated into English.

RESULTS

The analysis gave rise to two main themes and ten sub-themes. The first theme, *being comfortable in the outdoor environment*, is represented with four sub-themes: *sensitivity to weather, familiarity, security and calmness*. The second theme, *access to surrounding life*, consists of six sub-themes: *capacity for outdoor activity, sensual pleasures of nature, following the rhythm of life in nature, surroundings as a way to keep up to date, surroundings as a source to relate to past times and social potential of outdoor environments*.

Focus groups one, two and three in the results represent corresponding case numbers, described previously under Settings.

Being comfortable in the outdoor environment

Sensitivity to weather

The staff reported that the outdoors kept the residents healthy and made them happier, but the residents were sensitive to the weather. Particularly in focus groups one and two the staff discussed the weather, and as a woman in focus group one said: *“It is as if there is something wrong. No matter how nice it is or how much they see, if it is windy, then that’s it.”* Rain, wind, cold or snow were hindrances to going out since people felt cold and it could be slippery. Even if the staff pointed things out, the residents were not interested. *“They are totally occupied by being cold.”*

The staff also discussed how the residents grumbled less when they were outdoors and they were content just to sit in the sunshine with their eyes shut. One of the staff expressed it in the following way: *“But just to sit in the sun and drink your coffee, it is obvious that everyone benefits from that.”* Often the residents deliberated about whether to go out or not. *“If the weather is bad they are really sorry that they can’t go out. The first thing in the morning, they ask: ‘What is the weather like?’ and ‘Are we having coffee outdoors or indoors?’”* said one staff member.

Security

According to the staff it was important that there were sheltered and secure outdoor environments right beside the most frequently used common rooms in the building where the residents could easily get out by themselves. The staff in focus groups one and two discussed the importance of the proximity to the building and the staff. In focus group one, the staff said *“The patios feel secure because the windows and doors are usually open, they can hear sounds coming from indoors and the staff is close by.”* In focus group three the staff described their own environment as close and secure and thought it was the reason for the frequent use when the weather was fine. They mentioned that the residents were close to one another and the staff in the garden and that the fence of wide planks prevented outsiders from coming too close to the residents. They thought that this gave a feeling of security and that a larger garden might have been less pleasurable for the residents. The staff in focus group one mentioned that people with visible disabilities might feel uncomfortable when being viewed by outsiders. Therefore they needed places that prevented them from being looked at. Sometimes this was expressed by their next of kin and not by the residents themselves. The staff in focus group one considered the patios at their nursing home as fairly shut off from people’s view.

Insert Photo 1 here

The three focus groups considered it important that the outdoor environment was easy and secure to walk in. For example, in focus group one the participants said that the railing was a great source of security for the residents. Other aspects increasing the security were low thresholds and edges, and that the lifts were easy to use. However, one of the staff mentioned that the environment should not be too perfectly designed and doctored but rather informal.

Focus groups two and three also discussed the staff’s own insecurity about letting the residents be out on their own. Focus group two mentioned the risk of someone suffering from dementia wandering off if there was insufficient supervision. In focus group three a worry was expressed that people could fall outside on stairs or into the pond, especially during the winter season when it was slippery and the plants around the pond had not yet grown.

Familiarity

According to the staff, people suffering from dementia, in particular, needed a familiar environment with people around them that they recognized. A feeling of unfamiliarity could cause great problems. In focus groups two and three the staff recognized the nursing home and the park/garden as familiar environments. The residents felt at home and this was safe for them. In focus group one the patios were the safe outdoor environments and to a varying degree the surrounding park and neighborhood were used on the residents' terms. Staff and residents did not need to go far from the building for most of the residents to experience that they were somewhere else. A distance perceived as very short by the staff could be perceived as quite far by many of the residents. For most of those that did enjoy getting away from the nursing home, one hour was sufficient.

Insert Photo 2 here

Calmness

Focus groups two and three discussed calmness as a particularly important quality in the environment, especially with regard to people suffering from dementia. The staff considered calmness essential to prevent restlessness. Too many people counteracted the quality of calmness. Focus group two agreed about the calming influence of the sea and focus group three considered the garden in itself to be calming. Focus group three also mentioned the fountain as a certain source of calmness and relaxation. A lot of residents therefore chose to sit next to it.

Insert Photo 3 here

Access to surrounding life

Capacity for outdoor activity

Statements of the various ways that the outdoors was used recurred in the three focus groups. The span ranged from those who never left their room to those who went out in all weathers and during all seasons. These differences depended upon ability as well as personality according to the staff.

For most of the residents a little was enough, and they used the park or garden for short walks, sitting and relaxing, sitting and talking, drinking coffee, looking at the surroundings or reading the newspaper. In focus group one the staff made a few concrete comments about how the residents' use of the outdoors was limited when the greenery was not maintained adequately. For example, it was difficult for the residents sitting in the patios to see over the bushes and it was difficult to use the lawn areas when the grass was not properly mown.

The staff discussed that there should not be too much at a time and that one activity was enough for one day for many residents. *“For example on Fridays, Bengt visits and reads aloud from books on old Malmö and talks to everybody. After that it doesn't fit to ask: ‘Shall we go outside, Marianne?’”* Entertainment in the garden, such as a midsummer celebration or a barbecue, was very well appreciated among some of the residents, while others, in particular people suffering from dementia, could be very worried. A few residents wanted to be outside all day. *“They only have time to go indoors to go to the bathroom or take their meals. And they sit and get a sun tan.”* *“Well, I'm going outdoors again, they say.”*

The staff considered the surroundings outside their own environment important. They accentuated the importance of being able to choose: *“If I feel like walking around the houses, that’s what I do. If I feel like watching the sea, that’s what I do. If I feel like sitting in the garden, that’s what I do.”* Assisted by staff or next of kin, some of the residents enjoyed going away for longer trips or getting into the city and seeing the crowds in the street. A few residents left the nursing home area on their own and could stay away for several hours.

Sensual pleasures of nature

The significance of contact between the residents and natural elements was noticeable when the staff discussed the value of bringing in plants, leaves, flowers and branches, and placing them on the tables. Smelling, feeling and discussing the flowers was a source of great joy for the residents. Fruit and berries were appreciated, just to taste or to bake a cake with them. Further they mentioned the importance of getting daylight into the rooms and that the view from the window should provide color, flowers and greenery. In focus group one residents and next of kin had been very upset when the plants were allowed to grow over the windows for a long time and it got dark and confined in the rooms.

According to the staff, it was important for the residents to go outdoors to sense the freedom. *“You do not feel confined in a garden. When you come to the garden you feel somewhat more alive.”* They mentioned that outdoors you can feel the wind against your skin, the scent of flowers or new-mown grass, you can take off your shoes and feel the grass against your feet and you get fresh air and daylight. Some of the residents only wanted to go out to enjoy the sun and the heat of the sunshine. *“O, look how tanned I have become,”* the residents would say. One staff member emphatically talked about the lady who took so much pleasure in being out in the summer rain, to hear the drops and feel the splash against her skin. Another told of a walk with one of the residents: *“When she saw the lilac we had to cross the street and take the wheelchair right up to the bush for her to really smell the fragrance. It was very important to her. To feel the flowers, to somehow come close.”* Contact with animals was also mentioned in the focus groups. The staff recalled that the residents made comments about the birds outside in wintertime and that they often saved breadcrumbs to feed the birds. Everyone appreciated when visitors brought their dogs.

Following the rhythm of life in nature

The staff mentioned that the vegetation was important to be able to follow the seasons. When spring came the residents talked about it starting to sprout and they followed the progress of the flower buds. They noticed new seasons and periods through different flowers. *“It is the same for them as it is for us, when winter arrives you creep into your nest and when the sun comes you go back out again,”* one staff member said. Midsummer was a real highlight celebrated outdoors at the three nursing homes. According to tradition they picked flowers for the maypole and there were music and dance performances in the garden. The color of autumn, the variation when the trees turned red and orange and the arrival of horse chestnuts was also much enjoyed by the residents according to staff. Although the staff spent most time talking about experiences of other seasons than winter, they mentioned how beautiful and different it was with snow and white frost during winter. Focus group one mentioned that the staff usually brought Christmas trees and Christmas lights to the outdoor environment for the residents to see the light glimmer through the windows.

The importance of being able to follow the weather and seasons in the outdoor environment was also noticed by the staff through residents’ comments such as: *“Oh, the sun is shining!”*

or “*Oh, it’s pouring outside!*” When indoors the residents often talked about the weather and looked at the trees to see if it was windy outside.

Surroundings as a way to keep up to date

The staff noticed that contact with people and society outside the nursing home was important for the residents. Residents talked about what was happening outside, people and dogs walking past or cars and bicycles passing by. According to the staff the residents were happy to see something other than what happened in the nursing home, and they appreciated that there was life going on around them. In focus groups one and three the staff mentioned the importance of the seating places in the entrances where people came and went and a lot was happening. The most alert of the residents tended to sit there. The staff considered it positive that they tried to get involved with life around them to keep up their intellect and interest.

In focus groups one and two the outdoor environment had visual access to the neighborhood, which was perceived as beneficial for the residents. In focus group three there was no visual access from inside the garden, but this was not perceived as a disadvantage by the staff since the contact with the outside was provided from the inside the building.

The staff recalled how important it was for the residents not to be divorced from reality but to change environments every now and then, to get to see what it was like outside and to meet other people. One staff member talked about a lady at the nursing home with whom she went out every week: “*She doesn’t buy that much but she likes just going into the shops. She sits in a wheelchair. Just to see people and to see what’s in the shop, to see what has changed. And I can understand that that is very important for her.*” In focus group three it was pointed out that it was an advantage to live centrally because it was just a short walk from facilities like hairdressers, foot care, the hospital, the pharmacy and shops. The residents enjoyed looking in shop windows even if they were not going to buy anything. Instead residents and staff could laugh together at the changing fashions.

Surroundings as a source to relate to past times

The staff explained how the outdoor environment wakened memories and helped the residents to relate to their life and their past. “*Look at that hydrangea, I had one when I...*” Plants and elements outdoors made the residents talk about their gardens, what they looked like, what flowers they had and what flowers lasted well. Also the surrounding environment could bring up habits from the past. In focus group one the staff talked about a man that had his own garden and also worked with gardens and plantations in his past: “*He came to me this spring and asked when we were going to sweep the patios and prepare them, because we did that the year before. I mean the memories are there somehow. I was a bit surprised, but we did it and he liked it. He used to have a garden and a house and he is used to sweeping and pottering about.*” The surroundings could also lead to disappointment, as for this man who had worked with gardening and knew how it should be maintained. He was very disapproving when it was neglected. In focus group three staff mentioned the walk around the church as much appreciated. The residents then talked about when they had been to church for weddings and christenings.

Social potential of outdoor environments

The staff explained how social intercourse was different outdoors. The fellowship between different residents and between residents and visitors was increased outdoors. Outdoors seats were free and everybody was mixed, compared to indoors where people tended to guard their own areas and keep to their own places. The garden was thus considered more flexible by

staff. If staff was sitting with the residents and a visitor arrived it was easy to provide a place for them. The garden was considered a venue for meetings. Staff mentioned that whereas the residents never visited each other's rooms, they met and mixed with people from other floor levels in the gardens. It was an event for them when they would meet again after a few days and could exchange some news.

One staff explained that it was different to talk outside: *"It is easier to say: 'What kind of a flower is that? What's the name of it?' If you don't know someone else knows and there is a discussion about this flower. Somehow it is easier when you have something to focus the conversation on. That is more easy when outdoors."* According to the staff, they and the residents discussed whatever they saw around them: plants, houses, cars, people and dogs, for instance. In focus group two they mentioned how they made jokes about the smell of seaweed, which was appreciated by some and disliked by others. Also they made jokes about who was living in the small pavilion in the garden.

The staff also explained how a walk with a resident gave them a certain time together. This meant that they could attend to one resident only and talk as long as they wanted to. Also for people suffering from dementia the interaction with others could be improved outdoors. One staff member explained: *"It is better for them if you go out with one at the time, then they get undivided attention and they can attach to one and the same. It is easier for them to focus their minds. It is more confusing to be indoors."* Visitors were often more cautious indoors and they were easily troubled by other residents, the staff said. Outdoors they could speak freely. *"You can gossip about the staff if you like,"* one staff member added.

Another aspect of the outdoors mentioned by staff concerned the possibility to be proud of being in an attractive place that people admired and enjoyed. The staff proudly told how visitors, when coming for the first time, admired the view and the park or garden. They were then happy to say that they could use it as much as they wanted. Staff also mentioned how much better it must feel for the next of kin to the residents that the surroundings of the nursing home were beautiful.

DISCUSSION

A usable and attractive environment increases the possibilities and the drive to go outdoors both from the staff's point of view and from the residents' according to this study. Earlier studies show that if the close outdoor environment is well designed, this increases the number of visits to other recreational areas. This is valid for the population in general (Grahn & Stigsdotter, 2003) and at nursing homes for older persons (Grahn, 1988). This study aimed at describing factors of importance for the use of the outdoor environment at nursing homes for older persons, factors with implications for the design and content of the outdoor environment.

This study did not build upon the presumption that one outdoor environment could be ideal for all nursing homes for older persons. Rather it aimed at an increased understanding of the variety of roles that the outdoor environment plays and how this affects experience and use. The study did not intend to generalize but to describe the depth and complexity of the topic. The understanding that the results gave rise to is intended to be converted (by its readers) to other real life situations as regards use and design of outdoor environments for old and fragile people in need of care. This qualitative way of generalization is described by Guba & Lincoln (1989) as transferability and by Stake (1995) as naturalistic generalization.

The investigation gave rise to two main themes. The first theme, *being comfortable in the outdoor environment*, particularly connects with aspects of the residents' special needs to be able to and dare to use the environment, and the second theme, *access to surrounding life*, describes the outdoor environment as a source of change and variety in the everyday situation, to receive stimulation and to get away and feel free. The two themes counterbalance one another. On one hand the residents were reported to be very sensitive and needed a design that promoted security and safety and protected from disturbance and negative impressions, i.e. *precautionary design*, and on the other hand a design that promoted stimulation of senses and mind, i.e. an *inspiring design*. It is important not only to design with the limitations of the users in mind but to provide opportunities and stimulation for the most fragile as well as for the more healthy of the residents. This is described as *compatibility*, the fit between one's inclinations and environmental circumstances by the Kaplans (Kaplan & Kaplan 1989; Kaplan et al, 1998). Also, to create an instorative environment, i.e. an environment that recognizes our personality, it is important to stimulate abilities and give possibilities for development.

The duality expressed by the two main themes relates to the concept of usability by describing and exemplifying basic needs and restrictions for a person to *be able to move around, be in and use the outdoor environment*. Also, a person should be able to use the environment *on equal terms with other citizens*, which not only suggests that one has the possibility to go out whenever one wants to but also to get stimulation and opportunities for a varying degree of passive and active activities depending on personal wishes.

The first theme, *being comfortable in the outdoor environment*, gives implications for the *precautionary design*. Here the immediate surroundings are of the highest priority since a lot of the residents only get this far. The close environment is secure, easily reached and provides elements that help the residents to feel at home and easily recognize the surrounding. The *precautionary design* includes places protected from wind and rain, places that cannot be viewed by outsiders and places where you can be on your own. Further the design is barrier-free and avoids doctored design solutions that clash with the homelike quality of the environment.

The *precautionary design* connects to the restorative resource *Control* suggested by Ulrich (1999) in the theory of supportive gardens. The resource *Control* is described as the ability of persons to affect their situation and determine what to do and what others might do to them. This implies an environment that supports the user to the highest possible degree. Control is especially important to enforce under circumstances where the caregivers possibly support rather too much than too little. The results of this study indicate that a *precautionary design* could make the staff allow the residents to use the outdoor environment more on their own. Being able to and daring to use the outdoor on one's own also connects to the concept of instorativeness, which suggests that the ability to use the outdoor environment can restore a person to a more positive view of himself and his capacities.

The second theme, *access to surrounding life*, speaks for another side of the design, the *inspiring design* that promotes stimulation of senses and mind. This design provides views of colorful plants and traditional elements that connect with the seasons and the residents' earlier life, not only when using the outdoors but also from inside the building. It gives opportunities to see people coming and going to the facility or persons, bicycles, dogs etc. passing by. The design gives the possibility to come close to sweet-smelling vegetation, to touch leaves and

branches, to hear purling water and other things that stimulate the senses. It is a flexible design that gives possibilities to meet and to socialize in large as well as in small groups.

The inspiring design provides the users with restorative experiences when things and events in the surroundings catch the involuntary attention, i.e. *fascination*, and by creating opportunities to get away from pressures and obligations and thus restore directed attention, i.e. *being away* (Kaplan & Kaplan 1989, Kaplan et al, 1998). Further, the inspiring design generates the restorative resource *natural distractions* that gives opportunities to distance oneself from negative situations, i.e. *temporary escape*, which is fundamental to the restorative resource *control* (Ulrich, 1999). An inspiring design give the user opportunity to take part in real life and be part of the world of meaning, which is essential to the instorativeness of the environment (Stigsdotter & Grahn, 2003).

The importance of an inspiring design that relates to the earlier life of the residents in particular corroborates earlier studies that show the importance of an environment that confirms one's self-concept. For example, Grahn (1991) found that when nursing home residents used green areas it was most important that the surroundings were reminiscent of environments in which they were at their most active. Küller (1991) found that routines and environments that were more homelike than hospital like helped the residents to maintain a healthier and less confused state.

The inspiring design that gives opportunities to meet with other residents, visitors and staff as well as people from outside the facility, connects to the restorative resource *Social support* in the theory of supportive gardens. Social support is motivated by the fact that there is a general association between the number of social contacts and health status (Ulrich, 1999). This statement is interesting to put into relation to *the model of involvement* (Stigsdotter & Grahn, 2002). This model suggests that the stronger the mental capacity of a person, the more involvement with other people, and the opposite: the weaker the mental capacity of a person, the less the involvement with other people. Whereas contact with others is considered health-providing in the theory of supportive gardens, the model of involvement suggests that contact with others depends on a person's health status. Either way the design must provide social interaction in a flexible way so that people have the possibility to spend time together in groups of varying size, and also to spend time alone.

This study assumed the staff's insights as particularly important for understanding how the outdoor environment is experienced and used by the residents. Their statements originate not from one single individual's particular needs but from an overall picture of many different residents. The focus group interviews proved their understanding and empathy for the residents and thus the results give implications for design for the resident's support and benefit rather than for the staff's. However, the results need to be related to the residents' as well as next of kin's views to further develop the two concepts of *precautionary design* and *inspiring design*, to promote design that counteracts a situation that focuses only on necessary measures and instead creates opportunities to fully live out one's whole life.

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Table 1. Main characteristics of the three cases where the focus groups were conducted.

	Case 1 / Focus group 1	Case 2 / Focus group 2	Case 3 / Focus group 3
Outdoor areas	Large unfenced park, atrium, patios	Park with wire fence, balconies	Garden in part of courtyard fenced with wide planks, conservatory
Number of residents	88	31	24
Location of facility	Residential area, flats and detached houses	Residential area, detached houses, close to sea	Business, shopping and residential area, tower blocks

Photo 1. The small enclosed garden in a part of a courtyard discussed in focus group three.
Photo 2. The large unfenced park in a residential area discussed in focus group one.
Photo 3. The open park close to the sea discussed in focus group two.

Photo 1.



Photo 2.



Photo 3.

