



Ambius White Paper

Health, happiness and higher returns.

How engaging older adults in the design of their own space brings rewards to residents, carers and care home operators

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July 2009

“Over the next 20 years [in the UK], the number of people over 85 will double, the number over 100 will quadruple, and officials expect that 1.7 million people will need care and support.”¹

Many of us in the western world will end our lives in a care home. We hope and expect it to be a place where we will feel safe and cared-for. It will be comfortable and we will be looked after by committed, caring individuals. We will probably live in accommodation that has more in common with a hotel than a hospital: a room of one’s own, gardens and lounges and three meals a day served in the dining room. However, can a hotel ever be a home? Hotels express and reflect the identity and values of the proprietor, and the same is also true of care homes. Decisions on decor and furnishings are usually the prerogative of the home’s managers and often reflect the assumed tastes of the residents and the understandable desire not to offend. Chintz, floral patterns and gentle, pastel shades dominate.

However, recent research has demonstrated that enabling older adults in care to express their identity by the simple act of engaging them in the decisions about the way their homes are decorated, can pay huge dividends in terms of well-being and happiness. Empowering the residents even seems to **boost revenue for care home operators.**

¹ “A day in the life of an old people’s home”, article by Amelia Gentleman in The Guardian newspaper (G2 section). July 14th 2009.

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This white paper will explain some of the findings from a recent Ph.D.² A key study investigated issues of space management, social identity and well-being in care homes., Its findings, some of which are already being implemented, show significant benefits to the well-being of older adults in care as well as financial benefits to care home operators and an improved working environment for the home's carers.

The paper will explain how the outcomes of the research can be applied in practice and some of the benefits that might be expected as a result.

Finally, this paper will also highlight an unexpected observation from the research, an observation that may cause you to question your own assumptions about the style of decoration that older people prefer.

Did you know ...?

- A recent article in the Guardian Newspaper reported that in the UK, nearly 400,000 older adults are currently cared for in residential homes, 90% of whom have their care paid for by the state.³ The article further reports that as government policy encourages the provision of more nursing help for people in their own homes, the consequential effect is that those who enter residential care tend to be much older and frailer than in the past. Compared with a decade ago, residents arrive at care homes later in their lives and have many more care needs.
- People living in more community-oriented societies (e.g. Japan or Sweden) tend to live longer than those living in more individualistic societies such as the UK and USA, and people with a more socially active lifestyle live longer, healthier, happier lives than those who are more isolated.

² Knight, C.P. (2009). The Psychology of space: determinants of social identity, well-being and productivity. Ph.D thesis, University of Exeter.

³ "A day in the life of an old people's home", article by Amelia Gentleman in The Guardian newspaper (G2 section). July 14th 2009. The full article can be downloaded at: <http://www.guardian.co.uk/society/2009/jul/14/older-people-care-home/print>

A brief history of care homes in the UK

Care homes in the UK can trace their development to the establishment of institutions for Poor Law relief in the early 18th century. At that time, although accommodation was provided, no separate provision was made for older adults. The elderly were subject to the same harsh work regime as their younger counterparts, a situation that did not change until the early 20th century. Even then, provision within homes for the elderly was stark and unsympathetic.

Public areas in early 20th century care homes were clean, anonymous and deliberately bare. Residents followed the dress codes laid down by their institution and were not allowed to display their personal possessions or indeed develop areas of personal space.

Early care homes were spartan, of consistent design and developed to be easy to maintain and easy to manage (both in terms of the space and the people). The aim was to create a clean environment for the consistent delivery of the best quality *physical* care.

The principles governing the provision of care have changed dramatically since the second half of the twentieth century. In large part this followed the provision of The National Assistance Act (1948) which mandated that care of the elderly should follow the hotel model, and that distinctions should be made between those who required continuous nursing and those who could receive supervised accommodation in residential homes.

Additional legislation, such as the Legislative Homes Act (1984), established a regulatory body for the private homes sector, and now the hotel model dominates the residential care market.

Contemporary approaches to space management in care homes for older adults: the 'Hotel Model'.

Since the second half of the 20th century, residential care homes for the elderly have tended to follow the 'hotel model' of care provision. Increasing evidence that the imposition of 'lean' or spartan conditions on elderly residents was detrimental to their quality of life and may even shorten life led to care homes that were designed to offer humane, comfortable, dignified care in a high-quality environment. This means that the space is enriched and well decorated, whilst care is given as required by the staff of the home. Furnishings are pleasant and gardens are well-tended and welcoming to the more mobile residents. Indeed, in many care homes, residents' private rooms on the ground floor (often with direct access to the outside) command a premium over upstairs rooms.

Within care homes, best practice is that a varied range of facilities are provided that go beyond comfortable chairs and large televisions and other activities such as skittles rather, than cards, are encouraged in order to help residents stay active. Other activities, such as horticultural therapy and those that encourage greater social interaction are also recommended.

Whilst the hotel model is meant to be as humane as possible, the home remains a place that can never be your own. Even though you will have your own, private, room which you can decorate with family photographs and personal artefacts, there is little opportunity to express your identity and individuality beyond that space. Social areas, such as lounges, have to accommodate the needs of a diverse group of people, some of whom have significant care needs. These areas also have to be stimulating for those that are still mentally sharp, yet still be arranged in such a way as to allow care staff the room to manoeuvre less able residents.

Furthermore, the hotel model of care, where almost all the needs of the residents are met by care staff, has mitigated against costly legal action, especially in the USA. A recent study⁴ in the USA showed that in one 12-month period in 37 states, a total of 4,700 claims were made against nursing homes (a term that includes nursing care as well as residential homes). 80% were successful, with an average award of over \$400,000. Preventing residents doing things for themselves reduces the risk of accidents, which in turn, diminishes the likelihood of costly litigation.

The case for an empowered environment

A substantial body of research maintains that older adults are better able to relate to one another, to their carers and even to be able to prepare more comfortably for death, if they have a sense of empowerment over the space in which they live. Empowerment is said to make a positive difference to the way residents feel about themselves, which has been illustrated in a study by, Tu, Wang and Yeh (2006)⁵. They found that a sense of perceived empowerment within the home environment was the most important predictor of quality of life amongst elderly adults in a care home.

There is now considerable evidence to suggest that care homes should move from the position of recognizing the carer and cared-for, to a more equal relationship, where responsibility is shared between residents and staff and that support is given when needed.

However, there remains some resistance. A very common argument against increasing empowerment in a care homes is that devolving power to elderly residents may constitute, or be seen to constitute, an abrogation of care by the home's managers (see above),

⁴ Stevenson, D.G., & Studdert, D.M. (2003). The rise of nursing home litigation: Findings from a national survey of attorneys. *Health Affairs*, 22, 219-229, as referred to in Craig Knight's Ph.D thesis.

⁵ Tu, Y.C., Wang, R.H., & Yeh, S.H. (2006). Relationship between perceived empowerment care and quality of life among elderly residents within nursing homes in Taiwan: A questionnaire survey. *International Journal of Nursing Studies*, 43, 673-680., As referred to in Craig Knight's Ph.D thesis.

so given the threat of potential litigation, it would appear that a move away from the hotel model of care to a socially empowered model is not without risk. Nevertheless, the weight of evidence seems to suggest that it is probably a risk worth taking.

Despite this, in the early part of the 21st century it would appear that the majority of residential homes for older adults still adopt a model of care established sixty years ago

So, what do we mean by 'empowerment' in the context of space management and design? According to psychological theory, residents in a care home who believe that it is within their power to make a difference to the appearance of their living space should feel more empowered, thus leading to more positive feelings towards their fellow residents, the carers in the home, and the home itself.

These ideas were tested in a series of studies carried out in a care home in the southwest of England during 2008 as part of Craig Knight's Ph.D research, and which are still ongoing. Four hypotheses (left) were developed and tested.

Hypotheses tested

H1: Empowering care home residents by encouraging their collective input into the design of communal living space will increase their social identification with others in the home and their sense of psychological comfort.

H2: These factors in turn should encourage them to interact more with others and engage in more citizenship behaviour towards those who share the space with them, and...

H3: ... enhance their quality of life and physical well-being.

H4: At a concrete behavioural level collective engagement in the design process should also encourage residents to make more use of communal space.

Testing the idea of empowerment

In order to test these hypotheses, Craig Knight conducted a longitudinal study with two similar groups of residents in a care home who, although frail, did not require additional special care (e.g. for dementia). The residents, previously accommodated on two floors of an existing home, were being moved onto the corresponding floors in a new facility on the same site. This gave the opportunity to conduct a natural experiment. The residents of the upstairs floor were empowered, as a group, to make decisions about aspects of the decor in the new home (the empowered condition), whilst those on the ground floor (the unempowered, control group) did not receive this opportunity (but nevertheless did receive the high levels of benevolent care that are standard practice within the care home authority). The



Residents of the care home reviewing and discussing art and plant choices.



Some of the surprising choices made by the residents in the empowered condition. Note the contrast between their choice (marked) and the pre-existing standard corporate decor.

residents' families were also fully involved to ensure that residents had as much support as possible and were satisfied with the ethical conduct of the study.

As well as the provision of standard care, residents in the empowered condition were given the opportunity, as a group, to select from a range of pictures and plants with which to decorate their home's shared social spaces (i.e., the dining room, lounge and corridors). This involved all the residents on the floor taking part in two formal meetings with care home managers, representatives of an interior landscaping company (Ambius) and the researchers. Following these meetings (and without interference or influence from the care home managers, Ambius or the researcher) the residents were asked, as a group, to make collective decisions, about the decor of the communal spaces in the new home.

Four weeks before the move, at the time of the move, four weeks after the move and again four months after the move, the residents on both floors were asked a series of questions about their liking for the decor, their comfort, their identification with the staff and fellow residents, environmental satisfaction and physical well-being. As well as the questionnaires, observations by the care home staff were recorded, which allowed an assessment of frequency and duration of use of the social areas, together with observations of well-being and 'citizenship behaviour' (e.g. helpfulness towards fellow residents and staff)

Results

The results of the experiments are summarized in the green text on the next two pages. This study provides strong evidence that empowering care home residents, by encouraging their collective input into the design of communal living space, had a number of significant and positive consequences for both them and their carers. In particular, engaging with groups in this way led residents to have a greater

Summary of results.

Liking for decor. Residents in the empowered condition showed a significantly greater liking for the decor in their home after the move than those in the control condition. This is not at all surprising since the residents chose aspects of the decor in the empowered condition.

Comfort. Analysis revealed that participants in the empowered condition were generally more comfortable than those in the control group, but this difference only became apparent after the move. Indeed, prior to the move and the changes being implemented, residents in the control condition reported being significantly more comfortable than their peers.

Identification with staff. Over time, all residents tended to identify more with staff, but the increase was greater among the residents in the empowered condition.

Identification with residents. Participants in the empowered condition generally identified more with their fellow residents than those in the control group, but this difference only emerged after the move into the new home, once the changes to decor were made.

Life satisfaction. Analysis revealed that residents in the empowered group generally reported greater life satisfaction than those in the control group, but that this was only true after the move. Indeed, prior to the move, residents in the empowered condition reported having significantly lower life satisfaction than those in the control condition.

Physical health. Residents in the empowered condition reported feeling physically healthier than those in the control group and residents generally reported feeling healthier over time.

Observations of citizenship. Carers reported that participants

sense of psychological comfort and social identification with others in the home. Residents tended to display more considerate citizenship behaviour towards their fellow residents, and they reported and exhibited improved life satisfaction and physical health. Finally, the group of residents who had been collectively engaged in the design process were then found to make much more use of new communal space than those in the control group. Indeed, in the period after the move, residents in the empowered condition used their main lounge nearly four times as much as those in the control condition, and maintained this high level of use throughout the experiment.

After further long-term analysis, which showed that the effects of empowerment have been sustained, it was agreed that the conditions on the two floors of the care home be equalized. Recently, residents on the ground floor of the care home have been invited to take part in an empowerment exercise similar to that reported here. The effects of this development are the subject of a further study, the results of which will be reported in due course.

A surprise result

Although not part of the main experiment and subsequent analysis, the experimenters were surprised at the choice of plants and art made by the residents in the empowered condition. The residents were given a huge choice of plants, containers and art work of a wide variety of styles. Contrary to the prejudices of interior landscape designers, who had assumed that the residents might choose traditional styles of art and plants (the sort of style that was reflected in the corporate standard), the residents in this study chose bold, abstract art, colourful contemporary plant containers and plants with a distinct 'architectural' form (as shown in the photographs on page 6). These clashed with the pre-existing decor and stimulated a fair amount of discussion.

displayed greater citizenship as the study progressed, which by four months after the move was significantly greater for residents in the empowered condition than those in the control condition.

Life satisfaction. Over time, residents in the empowered condition reported an increase in life satisfaction, a situation not replicated in the control. It must be stated, however, that the baseline measurement showed high levels of life satisfaction in both conditions and that there was no decrease over time among the residents in the control group.

Alertness. In both groups, residents were observed to be most alert close to the time of the move, but that alertness tended to decline thereafter. There was no significant difference between groups.

Physical health. Analysis revealed that over time, residents in the empowered condition appeared to be in better physical health, especially four months after the move.

Use of the lounge. Before the move participants in the control condition tended to use their lounge more than participants about to be empowered, but after the move, when empowerment happened, this effect was reversed.

Although not tested, it is assumed that these choices were made, in no small part, because they were highly visible against the background of the space.

As we age, our senses deteriorate. Our vision becomes increasingly dull and our perception of colour weakens. Floral patterns, chintz and pastel colours may well merge to a blurred, plain, lifeless background against which the bright colours and bold shapes of the plants and art provide welcome relief and stimulation.

Applying the benefits

The results of this research show that there are several key benefits to introducing a degree of empowerment to residents of care homes. The most important of which is the increased life satisfaction, happiness and sense of wellbeing of care home residents. The simple act of empowering a group of individuals has resulted in a shift of attitude from being *in a home* to being *at home*. If this were the only benefit, it would be enough to make empowerment a worthwhile action.

However, these results have additional benefits. For the carers, the fact that residents show greater citizenship behaviour makes their jobs easier and for the operators of care homes, recruitment of residents becomes easier when there is a noticeably more engaging atmosphere.

Indeed, at the care home where the study was conducted, the managers reported that the upstairs floor (the empowered space) had a “better buzz” about it, which made it much easier to attract new residents than before.

One final benefit to the care home operator is that, as a result of the improved atmosphere, more people are applying for upstairs space than before, and that the previous discounts offered on upstairs rooms compared with the ground floor have been discontinued.

In the UK, many private care homes are operated by not-for-profit organizations, so any extra revenue achieved can be invested back into the homes to make them better places.

Applying the benefits of this research, however, requires more than simply forming a committee of residents and asking them to choose a few plants and pictures. The process that took place in this study required careful planning and a great deal of care to ensure that potential negative outcomes could be avoided. There is a complex set of skills that must be employed when setting up discussions and processes with older adults who may not be as alert or able to concentrate as they were when younger.

Further research: Prism

The research presented here is still at an early stage and is continuing at the University of Exeter.

Additionally, a research and consultancy practice, called Prism (Psychological Research into Identity and Space Management), has been established as a joint venture between Ambius and the University of Exeter under Craig Knight's leadership. This consultancy offers organizations the opportunity to participate in top-quality academic research, whilst at the same time benefiting from the expertise already gained.



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Prism is keen to forge links with any organization seeking to enhance their indoor environment and the experience of the people using it. Prism's goal is to make the provision of a psychologically rewarding environment an economic necessity, not just a moral option.

Interested organizations are invited to be part of this exciting research project where the potential to make a positive difference is very real. Prism's contact details are shown on the left.

About the authors



Kenneth Freeman is Ambius's International Technical Director, based in London. An expert in interior landscaping, he has been directly involved in all aspects of research into the benefits of interior plants as well as the development of horticultural best practices and the leadership of Ambius's ambitious sustainability project. He has developed a range of education and training programmes and is the author of continuing education programmes for architects in the UK as part of the Royal Institute of British Architects Continuing Professional Development Core Curriculum and in the USA as part of the American Institute of Architects Continuing Education System.

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Craig Knight is the Principal Researcher and Managing Director of Prism (Psychological Research into Identity and Space Management), a research-based consultancy based at the University of Exeter in the southwest of England. With over 20 years commercial experience in the field of office design and commercial furniture, Craig has now applied his knowledge to academic research. Under the supervision of world-renowned psychologist, Professor Alex Haslam, Craig's recently-published Ph.D thesis (The Psychology of Office Space: Determinants of Social Identity, Well-being and Productivity) has already been acclaimed. Ongoing research within Prism is aimed at refining the Prism model and offering a research-backed consultancy service to companies around the world. More details about the work of Prism can be found on their web site:

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Ambius White Papers
are published by
Ambius University

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Buffalo Grove, IL 60089
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Ambius is the global leader at enriching work places. Our services create harmonious surroundings that improve well-being, productivity and enhance brand image.

We are the world's largest interior landscaping company, with businesses in 18 countries in Europe, North America, South Africa and the Asia-Pacific region. Depending on where you live, Ambius offers additional services such as exterior landscaping, seasonal and holiday decorating, corporate art, ambient scenting and fresh fruit and flower deliveries.

Ambius is backed by unmatched technical resources, collaborative research with leading universities and the combined expertise of some of the world's most knowledgeable and experienced people, as well as the resources of the world's leading business services company - Rentokil Initial.

Ambius is ethically and environmentally aware. We are members of the UK Green Building Council, the US Green Building Council and the Australian Green Building Council. We are committed to improving the environment with our services and are actively working at reducing our own environmental footprint.

Full details of our services, values and vision can be found on our web site: www.ambius.com.