## Data attached to Work Package 4 of the Designing for Healthy Cognitive Ageing (DesHCA) Project

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## Data Archive Link and Reference

McCall, V; Rutherford, A (2024): Serious game data archive for the Designing for Healthy Cognitive Ageing (DesHCA) Project. Version 1. University of Stirling, Faculty of Social Sciences. Dataset. http://hdl.handle.net/11667/227

## Background

The Designing for Healthy Cognitive Ageing (DesHCA) aimed to test, understand, and identify facilitators and barriers for various stakeholders, including older people, in achieving cognitively sustainable housing, in both new-build and retrofit contexts.

The DesHCA project has developed a co-produced legacy tool called ‘Our House’ as part of its Work-Package 4, led by Professors McCall and Rutherford. The archived data attached to this work-package has been generated from 10 playtests of the serious game legacy tool that was developed. Our House is a serious game that was developed to generate research insights on how to deliver housing for older people that is cognitively sustainable and inclusive.

## Overview

These are the second set of notes (2 of 2) from playtest session 1, which took place on the 2nd of February 2023. The playtest comprised of 9 participants.

These notes have been fully anonymised, with all identifiable characteristics, including the participants’ names, removed, or replaced with pseudonyms.

**SERIOUS GAMES TESTING FRI 10TH FEB 2023 NOTES**

**Table one: Derek McDonald**

**Well-being chart: 11-12-12**

**Discussions stage one and two**

The team opted for bigger, easily adaptable spaces and chose a diner to allow more space, especially for hosting guests.

They said they reinstated the garden (I think this meant it was not in the example) they felt that a garden would be good for Derek’s mental health, especially with his undiagnosed neurological condition causing difficulty in walking and family living far away. Therefore, being alone at home since his wife passed away means he could enjoy the garden.

One participant discussed how having a vignette meant he went direct to a professional mindset thinking about what he would do if Derek was his client. He said if he had been asked first to consider his own home, that would have taken him first to his personal space and then when considering Derek’s home, he would also think about what he would have liked if he was Derek, but he realised he stayed very much as a professional and feeling removed from Derek’s situation other than thinking that could be him.

They said it was very interesting comparing ideas with the other person and enjoyed teamwork because the other person suggested different things the other person may not have considered.

They were making a lot of their decision based on the budget they had but also looking at the example and then adjusting a few things. They also felt they tried to predict the future for example, they thought the undiagnosed neurological condition would get worse and probably be diagnosed, and that the needs for Derek would increase, so they were already thinking about how to mitigate the future predicted health deterioration.

**Stage three discussions**

Their thought process was on how they could make the current home, work for Derek. Therefore, working with what they had, they decided to convert his living room space into a bedroom downstairs since his mobility had deteriorated and stairs were troublesome. They decided that the family could use the upstairs because they visited a lot, and it was a family home. They focused on repurposing the space as they focused on Derek’s access to his home. They felt Derek’s deterioration of his physical abilities and especially going upstairs, so they decided they would compromise on socialising space.

They applied for 7 points to adapt the house, but that was disappointingly denied. The team felt Derek would be ‘disgruntled’ with the outcome. They then tried to reach the right current physical level, but they could not find what could bring the physical level to three. This remained unresolved and resulted in considering as many adaptations as they could for physical adaptation without avail. They were feeling disappointed with the grant being denied and not reaching the adaptation level they wanted. However, they decided to adapt the kitchen floor to be non-slip. They concluded losing the sitting room was the trade-off to remaining in his family home.

**Table two: Susan Johnson**

**Well-being chart: 9-6-8**

**Discussions on stages one and two**

The team felt that Susan’s dementia would be most problematic because it would progress with time and might need more help. However, with her daughter having moved back in they felt they should help her mum, although they were unsure if she was contributing to the low finances if not contributing to housing costs and food, but they were only speculating why Susan’s finances are low. The budget heavily impacted their decision-making. This led the team to try and predict the future that Susan’s situation might worsen; therefore, to buffer that financially, they held some money back, so instead of using the full budget, they held some budget back to mitigate the future. (As I was listening, I wondered if their thinking was based on their professional judgement i.e. on future-proofing or if it was Susan herself living in that situation or if any other person would think ooh my situation might get worse let me save some money in case I have to change my living situation). The team used cost as their guiding principle and felt there was no wiggle room to make any changes with Susan having a very low level of finances and therefore was financially challenged to have the choices they would have wanted.

**Stage three**

They found that adaptations were unaffordable, and their budget was only 1. So, they were pleased that their prediction of Susan’s deterioration was right, and now they could use the budget they had used to rejiggle the cards so that they met the new physical and cognitive levels without needing adaptations. After doing this, having spent their initial budget and adaptation, they saw that the house was unsuitable for Susan without further adaptations and therefore applied for funding.

The team decided some of the adaptations needed were changing the shower controls so that Susan could wash independently without help. They also decided they needed adaptations in the kitchen, such as heat sensors and cooker isolators, to make cooking safe for Susan because she had been leaving the cooker on. They also decided they needed memory aids in the kitchen to help Susan remember things, especially her medication. In the bedroom, they wanted more memory aids and an alarm for when she leaves the house in the middle of the night. They also discussed making big texts available so Susan could be reassured. However, with cognitive level four increased from three, they thought Susan should probably move because they could not adapt the house enough to keep her safe with deteriorating dementia. They felt it would only get worse; therefore, best she moved before it progressed. However, they agreed there were dementia-related adaptations they could do as mentioned above, as well as adjusting light, assessing flooring for contrast, use of technology, use of colour contrasts and their grant was approved, so they could do a lot of adjustments. It also turned out that some of the adaptations they had discussed earlier they needed such as cooker isolators, sensors were installed in the next final stage vignette.

**Table three: Ben Richardson**

**Well-being chart: 11-8-5**

**Discussions stage one and two**

The team discussed how future planning was the key for Ben and tried to predict how his health might get worse and what he might need in future.

What they wished they could have for Ben, they felt they did not have enough money to achieve. Therefore, they were thinking of having a smaller house that he already had so it is easy to manage and maintain and might meet his future needs too. They felt the three-bedroom semi-detached family home might have good memories for him, and he loves it, but it may not be suitable for his future needs.

The team said while the complete example chat was a good visual, they felt it inhibited their creative decision-making because they found themselves copying it. They felt it inhibited their thought processes and wished they had been given a blank slate, the vignette, and the budget then worked that way.

They made their decisions looking at easy, hard, and challenging, then comparing that by budget. They said that reflected the real world where decision-makers were guided by budgets and money available other than the individual’s needs.

As they struggled to make the budget fit changed their decision on storage. They decided they did not need all that storage, so they gained five budget points by getting rid of it.

They discussed the trade-offs of each kitchen, for example, they felt a bigger kitchen would have the space needed for future adaptation, but then it was expensive. They opted for a smaller kitchen on the basis that it would be easy for Ben to manage, especially if his mobility worsens. However, before arriving to this conclusion, they spread all the kitchen cards on the board and used a deduction reasoning method discussing the pros and cons of each kitchen, looking at its cost, space, and adaptability level for the future. One participant said:

‘This kitchen might cost more but have fewer benefits to Ben or cost less and have the same level of benefits.’.

They also wondered what adaptations would be needed ten years later and were very keen to mitigate the future.

The garden they chose is all on one level, easy to adapt for future changes, and guided by the budget.

The team felt that Ben was asset-rich but income poor, and while he lived in a big family-adapted home and might love it might not be suitable for his increasing needs.

**Step three**

The team adapted the house within their budget, but since Ben did not have many points for adaptation, they applied for a grant. They wanted all doors widened and only had 6 points for adaptations but needed 30 points to achieve what they wanted. They said Ben needed a wet room, but he already had one. Ben had epilepsy and mild memory loss and confusion and therefore, they were discussing future accessibility as his memory and epilepsy got worse. The grant he had applied for the local grant manager did not agree with the quote, and Ben did not have the money to fund privately the percentage they said he would fund, so the team discussed if the grant was really needed, or different options were better. They wondered if it was the right place for Ben to live, three-bedroom house in a high-income area and no income for himself. They concluded the house was unsuitable, and it was time for Ben to move. They said they would want to consider all his housing options by making a referral to Local Authorities so that he could be allocated a social worker to assess his needs, an Occupational Therapist to assess the level of adaptations needed and a Housing Officer to assess his housing options.