Game for supporting dementia carers

Noreena Y. Liu
YL1D15@Southampton.ac.uk
The scale of the challenge

850,000 people living with dementia in the UK

By 2025
over one million people could have dementia in the UK

By 2050
this figure will exceed 2 million

Dementia: applying All Our Health (Gov.uk, 2018)
Support dementia carers

• **Raising awareness**: regarding human rights issues, local networks, and rescues, in order to raise the awareness of the public health issues and improve the physical environment;

• **Sharing daily life**: continue their daily life in the communities.

• **Sharing experience and resources**: sharing the ideas offers support to each other.
Games for Change

• **Games for health and well-being:** these are focused on physiology or psychology approaches. Examples of physiological initiatives include brain training, or linking with outdoor activities. Psychology is linked with education; when users understand their situation, they will change their behaviour.

• **Games for education:** Learning new things via a gaming platform.

• **Social games:** These can be linked with communities to increase their size. Social games can also be used to connect people interested in the same social issues.
Designing games for dementia carers

Conceptual Framework

Games for Change

Social Marketing

Game

Social Media

Awareness

Collaboration

Connections

Involved

Game

Knowledge

Promote

Engagement

Support

Strengthen

Informs

Improve

Components

Platforms

Social

Health

Education

Carers

Encourages

Produces

Carers

Encourages

Designing games for dementia carers

Conceptual Framework

Games for Change

Social Marketing

Game

Social Media

Awareness

Collaboration

Connections

Involved

Knowledge

Promote

Engagement

Support

Strengthen

Informs

Improve

Components

Platforms

Social

Health

Education

Carers

Encourages

Produces
Expert interviews

- **Carers:** The questions relate to carer’s needs.
- **Intervention:** The question relates to interventions, which including: social media, engagement and games.
- **Engagement:** Question are focused on how to use there elements to engage people.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Group</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Available item for carer</td>
<td>Participants 16.00 176.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Null 7.00 77.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Cover every aspect</td>
<td>Participants 8.50 93.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Null 14.50 159.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Games can educate people</td>
<td>Participants 15.50 170.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Null 7.50 82.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Games reduce stress and teach users</td>
<td>Participants 15.00 165.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Null 8.00 88.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Social media increase person’s community size</td>
<td>Participants 16.50 181.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Null 6.50 71.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Intervention change people’s behaviour and thinking</td>
<td>Participants 16.50 181.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Null 6.50 71.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Social marketing can change people’s behaviours to increase engagement</td>
<td>Participants 15.50 170.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Null 7.50 82.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Social media build up online community</td>
<td>Participants 15.50 170.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Null 7.50 82.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Social media increase engagement to help health issues</td>
<td>Participants 15.50 170.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Null 7.50 82.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Game engagement with users</td>
<td>Participants 16.50 181.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Null 6.50 71.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Engagement</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Engagement is key thing for carer</td>
<td>Participants 17.00 187.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Null 6.00 66.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mann-Whitney Test Results
Expert interviews

• Right information

“That most definitely is isolation and also support network. It is getting better but in illness a lot of family carers don’t get support as they need. So they struggle on and generally the point they get to where they are looking for help, they almost burn out because they cannot carry on anymore. For me, it is a massive challenge for them.”

• Technologies in helping dementia carers

“Many people are using games or apps —things like that. And if you make like fun games which are also educational, it kind of promotes a bit more and means more people are going to play it and recommend it. Then you still get the message across about dementia as well which I think is important.”
Expert interviews

• Engagement is a key factor

“Engaging people and actually getting people to recognise and face the fact is difficult. They also need to be given some confidence; that they have dementia is not the end of the world, but it can be very sad.”

“That might be a valuable thing for carers, as they haven’t got anywhere to go to release their stress, they might have just sat at the computer and typed it all out; it’s quite therapeutic to release that stress, even know it’s not useful, but it is useful for the person using it because in that way they can release stress.”
Games for other issues

The purpose of the game including education, health and social elements, in order to help dementia carers.

- **Post-traumatic stress disorder (PTSD)**: This type is very similar to dementia; they will lose their memory, but they can get treatment to get back to their normal life.

- **Schizophrenia**: This type of mental issue will depend on how well they can cope with it. It is very important for the family to listen and help them.

- **Drugs (recreational drugs & alcohol)**: recreational drugs and alcohol are involved with mental problems.
Thank you

Noreena Y. Liu
YL1D15@Southampton.ac.uk