Expecting the Unexpected in Participatory Design

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CHI’19 Extended Abstracts, May 4–9, 2019, Glasgow, Scotland UK
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ACM ISBN 978-1-4503-5971-9/19/05...
https://doi.org/10.1145/3290607.3311758
ABSTRACT
Participatory Design (PD) provides unique benefits in designing technology with and for specific target audiences. However, it can also be an intensive and difficult process, with unexpected situations which can arise at any stage. In this Special Interest Group (SIG), we propose that PD researchers may exchange “war stories” about their unexpected and difficult experiences with PD. This will facilitate reflective discussions and the identification of possible solutions, and enable future PD research to plan for similar situations, thereby making difficulties a little less unexpected.

KEYWORDS
Participatory Design; PD; co-design; difficulties; unexpected

INTRODUCTION
Participatory Design (PD) is an intensive process, requiring input from and involvement of users at a variety of levels and in a variety of ways. PD provides unique benefits in designing technology with and for target audiences, including increased: understandings of users and context of use, fit for purpose [6, 7], ownership [5, 10] adoption of technology [1, 12], and higher user satisfaction [2, 13]. PD also creates opportunities for some user groups (e.g. children) to develop increased self-esteem and confidence [4, 8, 9], collaborative, communication and problem solving skills [8, 9]. In addition, there is evidence that PD has the potential to enhance lives [3, 14], and alter social attitudes [11].

Despite these advantages, PD can be difficult to “get right”, especially when working with groups with special needs [7]. Unexpected situations can arise related to ethical considerations, attracting and retaining participants; supporting the engagement of all participants; extracting design information from PD activities; ending PD projects, and managing resources.

We propose a Special Interest Group (SIG) to discuss unexpected situations and failures encountered by PD researchers – something rarely discussed in publications. Each of the organisers of this SIG has been able to report anecdotally on difficulties they have encountered, and their on-the-fly solutions and adjustments to planned activities to accommodate unexpected developments and salvage prospective failures. This SIG will provide a venue for PD researchers to share their experiences with PD when it did not work as it should, as well as their work-arounds and solutions. We encourage discussions of other possible approaches that could have been taken, as a learning experience for the future.
Table 1: Planned Schedule of Discussion

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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</thead>
<tbody>
<tr>
<td>15 mins</td>
<td>Introductions of organisers and attendees, identification of PD experience through active “move around the room” activities</td>
</tr>
<tr>
<td>15 mins</td>
<td>Solicitation of unexpected experiences from attendees &amp; sorting into related topics using big paper, sticky notes, and affinity diagramming</td>
</tr>
<tr>
<td>25 mins</td>
<td>Discussion of common or novel unexpected situations and failures in each “phase” of PD in small group discussions, including topics such as:</td>
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<tr>
<td></td>
<td>• Ethical considerations</td>
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<td></td>
<td>• Attracting and retaining participants</td>
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<td></td>
<td>• Supporting participants’ engagement</td>
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<td></td>
<td>• Extracting design information from PD activities</td>
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<td></td>
<td>• Ending PD relationships</td>
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<tr>
<td></td>
<td>• PD resource management</td>
</tr>
<tr>
<td>25 mins</td>
<td>Group reflection &amp; sharing</td>
</tr>
<tr>
<td></td>
<td>• Common causes of unexpected situations and failures</td>
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<tr>
<td></td>
<td>• Preventing or managing unexpected situations and failures</td>
</tr>
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<td></td>
<td>• Back up plans vs adaptation on the fly</td>
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<tr>
<td></td>
<td>• Summary and concluding remarks</td>
</tr>
</tbody>
</table>

TOPICS OF DISCUSSION

Attendees of the SIG will be asked to reflect upon and share their unexpected experiences of PD, as the basis of discussions about solutions which have been or could be used in similar situations. Special attention will be drawn to solutions relevant to multiple PD audiences. Likely topics include:

- Ethical considerations of PD
  - Obtaining ethical clearance
  - Power differentials between researchers and participants, and between participant groups
  - Continuous informed consent through a range of activities and potential goal changes
- Attracting and retaining participants
  - Finding participant groups in short-term research timeframes
  - Communicating with participants and gatekeepers/knowledge-holders
  - Ensuring long-term commitments from participants
  - Networking and trust-building
- Supporting participants’ engagement and involvement in PD activities
  - Managing dominating participants and encouraging reticent participants
  - Collaborating and communicating across barriers of power, culture, language and experience
  - Supporting all participants to participate to the fullest extent of their abilities
- Extracting technology design information from PD activities, especially in fantasy contexts
- Ending PD relationships
  - Production of prototypes or technologies
  - Ownership of PD artefacts, design information and ideas generated
  - Closing PD projects
- Resource management within PD
  - Identifying the correct size and composition of a PD team
  - Identifying the correct length and number of design sessions/activities for a PD project

CONCLUSION

Our primary aim in this SIG is to stimulate reflective discussions and practice-sharing among PD researchers in relation to the unexpected situations and failures which may be experienced during PD. A further aim is to facilitate the identification of possible solutions to unexpected situations and failures, and enable future PD research to plan for similar situations, thereby making difficulties a little less unexpected.

The organisers of the SIG propose to create a report based on the SIG outcomes, identifying unexpected situations during PD (including failures), as well as solutions to overcome these situations. We hope that this report will form the basis of a future CHI Workshop.
ACKNOWLEDGEMENTS
Thanks to JP Hourcade for his advice and guidance during the early days of this SIG proposal. Thanks to Jacki Liddle and Peter Worthy of The University of Queensland’s Co-Innovation Group for sharing their experiences of obtaining ethical clearance for PD research with adults with dementia.

REFERENCES